Annual Evaluation Report

Reference Number: RPE:OTH 2006-11
September 2006

2006 Annual Evaluation Review

Operations Evaluation Department

Asian Development Bank

ABBREVIATIONS

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
AER	–	Annual Evaluation Review
ANR	–	agriculture and natural resources
BPMSD	–	Budget, Personnel and Management Systems Department
CAPE	–	country assistance program evaluation
CPA	–	country performance assessment
CPIA	–	country performance and institutional assessment
CSP	–	country strategy and program
DEC	–	Development Effectiveness Committee
DMC	–	developing member country
EA	–	executing agency
ECG	–	Evaluation Cooperation Group
EIRR	–	economic internal rate of return
ERD	–	Economics and Research Department
GDP	–	gross domestic product
ID	–	irrigation and drainage
IMR	–	infant mortality rate
IRM	–	Indonesia Resident Mission
KKZ	–	Kaufman, Kraay, and Zoido-Lobotan
MDG	–	Millennium Development Goal
MfDR	–	managing for development results
MMR	–	maternal mortality ratio
ML	–	mission leader
MTS II	–	Medium-Term Strategy II, 2006–2008
NGO	–	nongovernment organization
O&M	–	operation and maintenance
OCR	–	ordinary capital resources
OED	–	Operations Evaluation Department
OECD	—	Organization for Economic Co-operation and Development
PBA	–	performance-based allocation
PCR	–	project completion report
PPER	–	project performance evaluation report
PPTA	–	project preparatory technical assistance
PRC	–	People's Republic of China
SAPE	–	sector assistance performance evaluation
SPD	–	Strategy and Policy Department
TA	–	technical assistance
TPER	–	technical assistance performance evaluation report
TVET	–	technical education and vocational training
WSS	–	water supply and sanitation
WUC	–	water user committee

NOTES

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

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APPENDIXES

Key Words

development effectiveness, governance, corruption, project success, portfolio performance

This report was prepared under the direction of Bruce Murray, Director General, Operations Evaluation Department (OED). Jocelyn Tubadeza, Senior Evaluation Officer (team leader) was responsible for much of the analysis on which the report is based. Other OED staff who made written inputs included Edgardo Rodriguez, Principal Development Effectiveness Specialist; Suganya Hutaserani, Principal Evaluation Specialist; Tyrell Duncan, Principal Evaluation Specialist; Marco Gatti, Evaluation Specailist; Robert Schenck, Evaluation Specialist; Barbara Palacios, Senior Evaluation Officer; and Alvin Morales, Evaluation Officer. The report draws on OED papers prepared by M. G. Quibria, former Advisor. Peer review was undertaken by Keith Leonard, Director, OED1; Ramesh Adhikari, Director, OED2; and David Edwards, former Director, OED2. Ramesh Adhikari also helped in the finalization of the report. Consulting input was provided by Kenneth Watson of Rideau Strategy Consultants, Ltd. for some aspects of the report. Technical support for the statistical analysis was provided by Joseph Addawe and Valerie Pacardo.

Comments and suggestions on the draft version of this report from ADB's departments and OED staff were reflected as appropriate.

The guidelines formally adopted by OED on avoiding conflict of interest in its independent evaluations were observed in the preparation of this report. To the knowledge of the management of OED, there were no conflicts of interest of the persons preparing, reviewing, or approving this report.

Attachment: Management Response

EXECUTIVE SUMMARY

This 2006 Annual Evaluation Review (AER) of the Asian Development Bank (ADB) has two objectives: (i) identifying key factors that influence project success; and (ii) assessing the impact of the Operations Evaluation Department (OED) as measured by the degree to which OED's recommendations are implemented. Most of the analysis in the report focuses on the first issue.

The MTS II emphasizes sectoral selectivity and the identification of core operational areas for ADB. Various evaluation reports have concluded that selectivity, focus, and long-term involvement in a sector are important determinants of project success. The MTS II classifies sectors into three groups: (i) Group I: core operational sectors, where ADB will build up a critical mass of expertise and be a leading provider of assistance (financing and expertise); (ii) Group II: sectors for which building ADB's capacity is not a priority but which are identified as important for ADB to be able to meet the diversity of needs across different countries; and (iii) Group III: sectors with limited demand for ADB services, and in which ADB's performance has sometimes been poor; operations in these sectors will be gradually phased out.

Demand from developing member countries (DMCs) for assistance, strategic considerations, and broad development trends in the Asia and Pacific Region, together with evaluation findings, were the main criteria used to classify the sectors in the MTS II. Based on OED ratings, project success is consistently higher for Group I sectors than for Group II sectors. Three of ADB's poorest performing sectors (viz., fisheries, livestock, and development finance institutions) are in Group III. Group III also includes some sectors in which ADB has experienced success (e.g., airports, water transport, and communications); however, future demand from DMCs for ADB financing in these sectors is likely to be limited. The sectoral choices made in the MTS II are broadly consistent with OED findings related to project success.

Successful projects in five sectors (irrigation, power, water supply/wastewater treatment, education, and roads), all of which are Group I sectors in the MTS II, were analyzed to identify best practices that are associated with successful interventions. The analysis found 10 common factors that were present across sectors that contribute to good project performance: (i) strong ownership by governments and executing agencies (EAs); (ii) continuity of ADB's involvement; (iii) an ability to learn lessons from past experience and incorporate them in project design; (iv) careful project preparation; (v) strong EAs that operate in the right policy environment; are autonomous; and have the necessary human resources, technical skills, and access to adequate financing to implement the project and for operation and maintenance; (vi) an ability to identify and solve problems during project implementation; (vii) a clear unmet demand for the goods and services provided by the project; (viii) use of a participatory approach and involvement of stakeholders and beneficiaries in all project phases; (ix) successful institutional impacts; and (x) good performance of consultants and contractors.

Overall, evaluation ratings of ADB projects approved during 1970-1997 indicate that the project success rate was 64%. A midterm report will be submitted to the Asian Development Fund (ADF) donors in 2006. To provide some indication of the results being achieved by ADF-funded public sector projects, their success rates were compared with those of ordinary capital resources (OCR)-funded projects. The analysis found that (i) 70% of OCR projects were rated as successful compared with 58% for ADF-funded projects; (ii) ADF-funded projects approved in the 1970s and 1980s were rated considerably below contemporaneous OCR-funded projects, but in the 1990s the OCR and ADF ratings converged, and both sets of ratings improved markedly; (iii) project success varies from country to country, performance being better than

average in some countries with access to ADF resources and worse than average in other ADF-eligible countries; and (iv) project success varies by sector. Infrastructure projects are likely to be successful, and agriculture projects are more likely to experience difficulties, findings that apply for both ADF- and OCR-funded projects. For most sectors, outcomes were similar, but ADF-funded social infrastructure projects and lines of credit were less successful than those funded by OCR. It should not be surprising that OCR-funded projects are more often successful than ADF-funded projects. ADF is allocated to poorer countries, which often face daunting development challenges due mainly to their country-specific initial conditions and institutional capabilities. It is perhaps surprising that more significant differences were not found in the ADF/OCR success rates for projects approved in the 1990s.

Good governance and the control of corruption have become an increasingly important part of the development agenda. Improving governance and preventing corruption constitute one of the five strategic priorities in the MTS II and ADB has prepared a Governance and Anticorruption Action Plan II. Governance has the highest weight (50%) in the formula for allocating ADF resources. This signifies the perceived intrinsic importance attached to governance (as compared with other variables like economic management and portfolio performance) in ADB's assessment of country performance. The questionnaire used for the country performance assessments (CPAs) of ADB and the country performance and institutional assessments (CPIAs) of the World Bank are identical. The results are used for allocation of concessional resources. The CPAs/CPIAs use perception variables to measure the quality of governance in five areas: (i) property rights and rules-based governance; (ii) quality of budgetary and financial management; (iii) efficiency of revenue mobilization; (iv) quality of public administration; and (v) transparency, accountability, and corruption in the public sector. The literature on governance reviewed and the analysis undertaken for this report suggest that the causal relationship between governance and development effectiveness is complex and not straightforward.

There are a wide variety of definitions of governance, and there are many measurement problems that make the data less than fully reliable. The governance indicators most widely used by researchers on the topic were developed by the Policy Research Department of the World Bank developed by Kaufman, Kraay, and Zoido-Lobotan (KKZ). Those indicators, which are available for 1996-2004, cover six dimensions of governance: (i) voice and accountability, (ii) political stability, (iii) government effectiveness, (iv) regulatory quality, (v) rule of law, and (vi) control of corruption. These dimensions are broadly consistent with the CPA/CPIA and both sets of data are correlated. However, the purpose of the analysis of governance indicators and the resource allocation exercises are distinct, the former focusing on how, or if, governance influences development outcomes, while the latter is based on the intrinsic importance of good governance as an end in itself.

An analysis of the relationship between the KKZ measures of governance and macroeconomic indicators suggested the following: (i) Although there is a strong, positive relationship between the level of economic development and all six governance variables when a worldwide data base is used, the relationships are much weaker if only countries in which the per capita gross domestic product is lower than $5,000 are analyzed. (ii) Using a worldwide data base, no significant relationship was found between good governance and the rate of economic growth over 1996-2004. (iii) Although the Asia and Pacific Region is the fastest growing economic region in the world, governance in many countries is weak according to these indicators. (iv) Some DMCs in the region with relatively good governance had lower growth rates than countries with lower governance ratings. It is not clear why some countries have experienced rapid economic growth and a reduction in poverty despite having relatively weak

governance, while other countries with better governance have achieved less satisfactory development outcomes.

Whether the quality of governance in a country influences the success rate of ADB-financed projects is a particularly relevant question for ADB. An analysis of the relationship between governance and the ratings of projects approved in the 1990s suggests that, while there is some evidence that good governance improved development outcomes at the country portfolio level, the statistical relationships are moderate or weak. There is a positive relationship between development results and good governance—better political stability, government effectiveness, regulatory quality, rule of law, and control of corruption contributed to project success at the country portfolio level. At the project level, after controlling for the sector, only political stability remained significantly related to project success.

There appears to be some evidence of a relationship between some of the dimensions of governance and good project outcomes. However, it is not clear how strong or robust the relationships are. Other factors are also important, perhaps more so than governance, in determining project success. The relationships between good governance at the macro level and project success for ADB's portfolio may be somewhat weaker than is commonly assumed. It may be that governance issues at the sectoral level have a more direct bearing on project success.

Subsequent to the ADF IX replenishment, ADB harmonized its performance-based allocation (PBA) procedures with those of the World Bank. ADB's 2004 PBA policy for ADF resources increased the weight given to governance in the measurement of country performance from 30% to 50%, although this is still lower than the 66% weight assigned to governance in the corresponding World Bank formula. There was, however, no analysis undertaken by ADB that demonstrated that good governance is the key binding constraint for development in all DMCs and that it merits such a high weight in the PBA formula. ADB has not undertaken a rigorous study that links good governance as a causal factor to good economic performance, reducing poverty, achieving other development results, good portfolio performance, or project success. Such a study should be undertaken to clearly establish the linkage between governance and the achievement of development results, the composition, measurement and weighting of the governance variables in the PBA formula and whether sector level governance variables should be included in the formula. Given the importance of harmonization, the study should be undertaken in partnership with the World Bank. If the study does not establish a clear linkage between the governance variables and the achievement of development results, consideration should be given to lowering the weight for governance in the PBA formula. Lowering the weight might be perceived as sending the wrong message, given that ADB has recently adopted the MTS II, which places priority on good governance and controlling corruption. However, this must be balanced against the potential harm that may be caused to DMCs whose ADF allocation is reduced because of a score on an imperfect variable that is difficult to define, measure and compare over time and across countries.

The foregoing should not be taken to indicate that OED feels that good governance and efforts to control corruption are unimportant. Good governance is clearly important in its own right, and it is plausible to assert that good governance contributes to the achievement of development results. Controlling corruption can only benefit project beneficiaries and taxpayers. The issues identified by OED relate to a lack of clarity of definition, the difficulties of measurement, a lack of rigorous analysis of the subject in ADB, and questions about whether governance is the most important binding constraint for development in all DMCs. These issues are important because in the PBA formula ADB purports to be able to accurately define and

measure governance on a numeric scale and uses the results to reward or punish DMCs by allocating more or less ADF funds, depending in large measure on the governance score.

Problems of defining and measuring governance and the unintended mis-use of governance indicators does not apply just to ADB. A recent report prepared by the Development Center of the Organization for Economic Co-operation and Development concluded that even the most carefully constructed governance indicators lack transparency and comparability over time, suffer from selection bias, should not be used to compare governance across countries and do not identify how to improve governance. That report concluded that often governance indicators are mis-used by: (i) foreign investors for country-risk analysis; (ii) donors for aid-allocation purposes; and (iii) academics for regression analysis.

Many factors influence project success—sector characteristics; country characteristics including the capacity of the EA, the economic context, and the quality of governance; and ADB inputs including contributions of the mission leader and other mission members, project administration, and the quality of supervision and guidance from senior staff and Management. In addition, external factors such as international commodity prices, natural disasters, and weather conditions may also affect project success. A quantitative analysis was carried out taking many, but not all, of these variables into account to assess their relative importance in project success.

The results of the analysis and their implications may be summarized as follows. First, sector characteristics are strongly related to project success. This implies that projects should be identified and designed based on a detailed sector assessment and a results-oriented sector roadmap. In some sectors, projects are relatively more difficult to implement and to achieve intended outcomes than in others. For example, infrastructure projects are generally relatively successful, while agriculture projects have proven to be challenging and often are not as successful as anticipated. Second, the analysis found that country economic climate influences project success. This finding underscores the importance of sound country economic analysis to underpin project formulation. Third, the analysis found a positive relationship between one governance variable (regulatory quality) and project success. Fourth, long delays are associated with projects that perform poorly. Because of the delays, ADB devoted more project administration effort to the less successful projects.

Delays in implementation may be an early warning signal that there is a risk that the expected development outcomes will not be achieved. ADB should make greater efforts to estimate realistic project implementation schedules, make greater use of project readiness filters to avoid startup delays, and make major project administration efforts to identify and solve problems for projects that are experiencing major delays. The key to good project administration is to identify and solve problems.

While full attention to ensuring the quality of projects at entry is important, measures should also be taken by ADB and the DMCs to ensure effective implementation and operation of projects, so that intended development impacts flow from them. With more effective incentive systems that focus on the achievement of project success or development results and strengthening accountability chains, ADB inputs to project processing and implementation could be further strengthened to contribute to a higher probability of project success.

Because ADB implicitly places considerable importance on project formulation and approval, and mission leaders play an important role in ensuring quality of projects at entry, the characteristics of mission leaders were analyzed to determine if they have changed over time.

This analysis is exploratory in nature and does not cover all factors that influence either staff performance or project quality. The analysis indicates that the profile of mission leaders changed during the past decade, resulting in younger, less experienced mission leaders and fewer mission leaders with technical backgrounds. This confirms the feedback from some of ADB's largest clients.

ADB's formal and informal incentives reward loan processing and approval. Complementing ADB's current staff evaluation system with a system that focuses on the achievement of project success would be a major human resources management challenge. If this challenge is successfully met, it could help ADB to emerge as a stronger and more effective institution that would be more responsive and relevant to client DMCs and better able to deliver results over the medium term. The chain of accountability for achieving development results needs to be strengthened to complement the present staff performance appraisal system. The incentives of Management, senior staff, and staff need to be fully aligned. Therefore, to be effective, the chain of accountability would need to begin at the top, with Management and senior staff, and then cascade down to staff.

Successfully tackling the approval culture to better focus on achieving quality at entry, effective project administration and supervision, and eventually development results requires (i) institutional systems that effectively track operations (loans, technical assistance [TA], the country strategy and program [CSP], etc.) throughout their full cycle, including achieving development results; (ii) institutional operations planning and business processes that place greater emphasis and importance on post approval/project implementation; and (iii) departmental work programs and priorities that pay balanced attention to both project processing and project implementation. A reliable, tested system to measure ADB's contributions to achieving development results must be developed. This is itself a major challenge that ADB and other multilateral development banks are facing. In the absence of clear and understandable measurement tools, there is a risk that a medium-term reward system would be wrongly applied and would not motivate ADB staff, thus frustrating its purpose. The solution to this question will require a long and careful assessment and an analysis of best practices in comparable organizations to learn from their experience.

The work undertaken for this AER was the first attempt in ADB to examine ADB's staff accountability and project success. Further study is required to assess how staff performance evaluation systems can be used to provide stronger incentives to improve quality at entry, to encourage better project administration and supervision, and ultimately to deliver better development results.

Adjusting ADB's incentive systems to encourage more focus on project success/development results than on project approvals is consistent with commitments made in both the 2004 Human Resources Strategy and the MTS II. Thus the question is not *whether* to change the incentive systems that govern the behavior of ADB staff and Management; rather the question is *how* this might be done. OED's purpose in raising this issue is to spark debate on how to realign Management and staff incentives to focus on achieving development results.

Turning to OED performance, one measure of the effectiveness of an evaluation system is the degree to which action is taken on evaluation findings. For the 2006 AER, OED strengthened its reporting on this topic. Positive findings include (i) adequate action being taken on most of the recommendations in the 2005 Annual Report of the Development Effectiveness Committee (DEC), although satisfactory action on some previous recommendations remains outstanding; (ii) evidence that the sectoral priorities in the MTS II are consistent with OED

findings; (iii) Management's agreement to prepare an action program to improve portfolio performance in response to a DEC request that followed its discussion of the 2005 Report on the Loan and TA Portfolio, although this was not included on the agenda of the Board, despite a request from DEC; (iv) feedback that country assistance program evaluations influence the subsequent CSPs; (v) indications that some of OED's broader evaluations have had an impact; and (vi) agreement by Management to a DEC recommendation to develop a better system to monitor actions taken on OED findings.

Despite this progress, OED has not yet fulfilled its full potential in helping ADB to become a learning organization and to improve future operations based on the lessons from past experience. There remains significant room for improvement in institutionalizing evaluation feedback: (i) The Work Program and Budget Framework 2006–2008, ADB's medium-term business plan, does not make any explicit reference to evaluation lessons. (ii) Less than half of the loan proposals considered by the Board in 2005 made explicit references to evaluation lessons and recommendations. (iii) The new business processes for loan processing have done away with the opportunity for evaluation lessons to be considered adequately early in the project design process. (iv) OED comments at the interdepartmental review and Management review stages often focus on suggestions to improve the presentation of the Board paper—an opportunity has thus sometimes been lost to clearly summarize OED lessons of relevance to the project and to feed those lessons into the project processing process. (v) There is limited reference by only a few chairs to evaluation findings during Board discussions. (vi) A more efficient and practical means must be developed to make the body of evaluation findings accessible to, and used by, ADB staff.

Recommendations:

1. **OED should undertake further work to identify factors that influence project success and ultimately country outcomes.** The qualitative and quantitative analysis in this report found that many factors influence project success. Future evaluations should distinguish between two broad types of factors: (i) those within ADB's control (e.g., continuity of ADB involvement; quality at entry; project design; learning lessons from past experience; amount and quality of ADB supervision during project implementation; use of participatory approaches; role of ADB staff and consultants); and (ii) those that are not (e.g., country ownership; country characteristics; macroeconomic climate; sector level governance; capacity of the executing agency). (Responsible lead department: OED).

2. **Undertake a rigorous analysis to establish that good governance is the key binding constraint for development in all DMCs and is a causal factor for good economic performance, reducing poverty, achieving other development results, good portfolio performance, or project success.** Depending on the results, consideration may have to be given to including sector level governance variables, or lowering the weight for governance, in the PBA formula. Benchmarking a country's governance performance and then rewarding those countries making progress in improving governance would be more consistent with managing for development results than making major decisions on ADF allocations based on the governance score in any one year. Steps also need to be taken to improve the consistency of what is meant by governance in ADB's various governance-related policies (e.g., PBA policy, Governance and Anti-Corruption Action Plan, country governance assessments, CSPs, MTS II). (Responsible lead department: Strategy and Policy Department)

3. **Undertake a study to explore the feasibility of strengthening ADB's staff performance appraisal systems to provide stronger incentives to focus on project quality at entry and project administration and supervision to encourage achieving better development results from ADB operations**. Initial work could include an assessment of best practices in comparator institutions and developing indicators to include in the system to measure the achievement of development results. While a challenge, providing a better balance of staff incentives for lending project/TA processing/approval and lending project/TA performance could help ADB to emerge as a stronger and more effective institution that would be more responsive and relevant to client DMCs and better able to deliver results over the medium term. (Responsible lead department: Budget, Personnel and Management Systems Department)

4. **Make more concerted efforts so that ADB becomes a learning organization in terms of using evaluation findings to improve the design of future operations.** Steps that should be taken in the short term include: (i) defer the finalization of selected policy reviews until after DEC has considered the corresponding evaluation; (ii) OED to invest more resources in knowledge management and dissemination activities; (iii) OED to prepare concise compendiums of lessons by sector/subsector and country; and (iv) OED to develop measurable indicators to monitor whether ADB is becoming a learning organization. (Responsible lead department: OED).

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I. INTRODUCTION

A. Background

1. This 2006 Annual Evaluation Review (AER) of the Asian Development Bank (ADB) has two objectives: (i) identifying key factors that influence project success;[1] and (ii) assessing the impact of the Operations Evaluation Department (OED) as measured by the degree to which OED's recommendations are implemented. Most of the analysis in the report focuses on the first issue.

2. The context for future ADB operations is set out in the Medium-Term Strategy II, 2006–2008 (MTS II), which also sets the context for the 2006 AER. Three key themes dominate the MTS II: (i) enhancing the relevance of ADB; (ii) making ADB more responsive, flexible, and efficient; and (iii) focusing on the achievement of results. OED has an important role to play in independently reporting on ADB's actual achievement of development results and the factors contributing to actual outcomes.

3. The MTS II identifies five strategic priorities to improve ADB's relevance: (i) catalyzing investment, (ii) strengthening inclusiveness, (iii) promoting regional cooperation and integration, (iv) managing the environment, and (v) improving governance and preventing corruption. The MTS II identifies core sectors in which ADB will focus its operations and build up expertise. This will require adjusting the allocation of budgetary resources and ADB's staff skills mix.

4. The MTS II calls for introducing new products and business processes to make ADB more responsive, flexible, and efficient. It also recognizes the need for ADB to achieve greater development effectiveness. Initiatives in this area include a renewed emphasis on project implementation and portfolio performance, and using quality-at-entry mechanisms and project readiness criteria. The MTS II also recognizes the need for a shift in corporate priorities from an institutional culture that prioritizes loan approval and lending volumes to a culture wherein portfolio performance and contribution to development outcomes become predominant. This shift must be supported by the development of results-based performance evaluation systems at all levels.

B. Evaluation Developments in 2005

5. To enhance its independence, on 1 January 2004, OED began reporting directly to the Board of Directors through the Board's Development Effectiveness Committee (DEC) rather than to the President. Thus, 2005 was the second year of the new reporting structure. In its 2005 Annual Report,[2] DEC reported to the Board that it was satisfied that ADB's operations evaluation activities were adequate and efficient.

6. Major developments in ADB's evaluation system in 2005 included the following:

(i) **OED work program**. There has been a gradual shift in OED's work program, with more emphasis on broader, more complex evaluations (e.g., country and sector assistance program evaluations, thematic and special evaluations) and reduced coverage of individual operations. In preparing the 2006 work program, for the first time there was broad consultation with current and former DEC

[1] As measured by project performance evaluation reports (PPERs) and project completion reports (PCRs) in the absence of PPERs.

[2] ADB. 2005. *Annual Report of the Development Effectiveness Committee*. Manila.

members and ADB Management, as well as with the operations departments. The objective was to develop a more relevant and strategic work program. The work program is also now better sequenced so that the results of one study can feed into others. It was adjusted to reflect strategic priorities by bringing the evaluation of the environment and social safeguards forward into the 2006 work program so that the results could be used when ADB reviews those policies. OED's work program and the criteria used to select evaluation topics were publicly disclosed for the first time in 2005. The list of OED reports produced in 2005 and the future work program are shown in Appendix 1.

(ii) **Improved quality of Management responses to OED reports**. When OED became independent, the roles of DEC, OED, and Management changed. OED's role is to independently distill lessons and make recommendations for desirable improvements. Management's role is to decide which recommendations are acceptable and should be implemented. DEC's role is to guide Management on the priorities for change and improvement. During 2005, the quality of the responses prepared by Management to OED reports improved. Sharper OED recommendations were one of several factors that contributed to this outcome.

(iii) **Public disclosure of evaluation reports**. Since an OED evaluation report is final upon approval by its Director General, beginning in 2005 reports were made publicly available immediately upon circulation to Management and the Board, without waiting for the Management response or the DEC discussion of the report. Management's response and the Chairperson's summary of the DEC discussion are later publicly disclosed as they become available.

(iv) **Evaluation methodologies**. To improve the consistency and quality of evaluation reports, guidelines for the evaluation of projects,[3] program loans, technical assistance (TA) grants, and country assistance program evaluations (CAPEs)[4] were issued in 2005. During 2005, there was increased discussion with developing member countries (DMCs) on draft CAPEs, and efforts were made to give a voice to DMCs to identify areas wherein they felt ADB needed to improve.

(v) **Staffing**. Staff vacancies, approximating 20% at the beginning of the year, constrained the delivery of the 2005 OED work program. OED's human resources were improved in 2005 as vacancies were filled. One of OED's divisions was restructured. The Enhanced Separation Package provided an opportunity to further restructure OED's skills mix. A major challenge in 2006 will be to fill vacancies in the second OED division. Steps were taken in 2005 to increase the contributions of some of OED's national officers by assigning them responsibility for producing specific outputs. To provide guidance for staff, OED issued conflict of interest guidelines in 2005.

(vi) **Dissemination of OED reports**. In 2005, more emphasis was placed on disseminating OED reports, both internally and externally. However, upgrading OED's web page and internal knowledge management systems in 2006 is required before significant progress can be made in this area.

(vii) **Harmonizing evaluation approaches across multilateral financial institutions**. Membership in the Evaluation Cooperation Group (ECG) includes the heads of the evaluation departments of the multilateral financial institutions. The Director General of OED was the ECG chair for 2005/2006. This raised ADB's profile in the international evaluation community. The progress that ECG

[3] http://adb.org/Documents/Guidelines/Evaluation/PPER-PSO/default.asp.
[4] http://adb.org/Documents/Guidelines/Country-Assistance-Program/guide-peparation-0206.pdf.

is making in harmonizing evaluation approaches across institutions is summarized in Box A1 in Appendix 1.

C. Structure of the Report

7. The 2005 AER concluded that project success had improved over time and that it differed significantly by sector and by country. In discussing the 2005 AER, DEC raised questions about other factors that might affect project success, including governance. The 2006 AER is designed to deepen the analysis of the factors that may influence project success. The 2006 AER also discusses some of the implications for ADB's human resource management to improve staff incentives to focus more on development results/project success. The remainder of the report is divided into five chapters.

8. **Chapter II**. Chapter II is designed to (i) assess broad trends in project outcomes to determine whether the upward trend in ratings reported in the 2005 AER has been maintained, (ii) summarize outcomes by country and sector, (iii) explore whether there are consistent differences in the outcomes of ADF-funded and ordinary capital resources (OCR)-funded projects, and (iv) identify the characteristics of successful projects in key sectors. Some believe that evaluations tend to focus on the negative and to draw lessons mainly from failures. When considering OED's 2005 budget, the Budget Review Committee asked OED to identify the lessons and good practices from successful projects. Comparisons between what succeeds and what does not, and the identification of best practices that are associated with successful interventions can be a good learning mechanism. Chapter II summarizes the lessons of successful projects in selected sectors—irrigation, power, water supply/wastewater treatment, education, and roads (with further details in the corresponding appendixes). These sectors were all identified as areas in which ADB's operations are expected to grow in the MTS II period. Chapter II identifies 10 factors associated with successful projects that are common across the key sectors. It analyzes the results achieved by ADB's public sector projects and compares the success of projects by source of funding (i.e., OCR and ADF).

9. **Chapter III**. Good governance and the control of corruption have become an increasingly important part of the development agenda. Improving governance and preventing corruption are strategic priorities in the MTS II period. Commonly held views are that (i) weak governance and corruption retard development and development effectiveness, and (ii) the poor suffer the most from weak governance and corruption. Despite these widely held views, analyzing the influence of governance on economic growth has resulted in a debate among researchers. Most papers on this topic focus on macro level analysis. OED's findings can be used to provide a micro level input into the growing body of knowledge in this area. Chapter III examines the relationship between governance and both portfolio success at the country level and project success. Difficulties related to definitions and measurement of governance variables are discussed in Chapter III. The relationships between governance and the level of economic development are examined at the country level. Various statistical techniques are used to explore the relationship between the quality of governance and the success of ADB-funded projects. Chapter III concludes with some observations about the way ADB uses governance in the PBA formula to determine the amount of scarce ADF resources that will be available to various countries.

10. **Chapter IV**. This chapter examines the relationship between project success and a limited set of key variables including sector, country characteristics (e.g., economic climate, governance scores), ADB inputs (e.g., mission leadership, project administration), and the quality of project implementation (e.g., delays, cost variations). Statistical techniques are used

to determine which variables are most strongly related to project success, after controlling for the other variables.

11. **Chapter V**. Factors that are internal to ADB, such as staff and budgetary resources, may also influence project outcome. Chapter V focuses on the changing characteristics of mission leaders, and human resource management and incentives. It highlights the importance of designing staff incentives to focus on development results as opposed to the current system in which informal and formal incentives tend favor project processing and approval. Chapter V concludes by raising the question of whether it is possible to strengthen ADB's human resource management system by linking Management, senior staff, and staff accountability with the achievement of development results.

12. **Chapter VI**. In assessing the effectiveness of the evaluation system, DEC acknowledged that (i) the quality of OED's recommendations had improved, but more progress was required to ensure that OED's recommendations were implementable; and (ii) the quality of Management responses had improved, but further improvement was needed. DEC felt that the weakest link in the ADB evaluation system was the monitoring and reporting on actions taken on evaluation recommendations.[5] Chapter VI examines the impact of OED as measured by the degree to which its recommendations are implemented. Unlike the 2005 AER, this report examines the implementation of the more strategic recommendations separately from the large number of recommendations that are included in the evaluation of individual projects. Chapter VI assesses the consistency of sectoral priorities in the MTS II and evaluation findings; and discusses the implementation status of recommendations included in the *Annual Report of the Development Effectiveness Committee*, the action plan prepared by Management in response to the *2005 Annual Report on Loan and TA Portfolio Performance*, the use of the CAPE in preparing the subsequent country strategy and program (CSP), and feedback from mission leaders on the usefulness of OED reports. A statistical summary of the implementation status of recommendations included in project/program evaluation reports (PPERs) is also included.

II. PUBLIC SECTOR PROJECT OUTCOMES

A. Introduction

13. By the end of 2005, ADB's cumulative lending had reached $116 billion, of which $85 billion was funded from OCR and $31 billion by ADF. In both cases, most lending was to public sector projects, accounting for 77% and 86% of the respective totals.[6] To assess project outcomes, ADB's operations departments prepare project completion reports (PCRs) for all projects, typically 1-2 years after completion. OED prepares PPERs about 3 years after project completion. Until 1984, PPERs were prepared for all projects. Since then, a stratified random sample of projects has been evaluated each year. OED has restructured its work program to focus more on CAPEs, sector assistance program evaluations (SAPEs), special evaluation studies (SESs), and policy evaluations. To free resources for these tasks, the sample of projects selected for independent evaluation has been reduced; it covered 25% of self-evaluated projects in 2005.[7]

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[5] ADB. 2005. *Annual Report of the Development Effectiveness Committee*. Manila.

[6] The remaining OCR lending is accounted for by program loans (20%) and private sector lending (3%). The remaining ADF lending is accounted for by program loans (14%).

[7] The 2005 sampling error of estimate is +/-22%. PCRs have included a rating since 1995. The quality of the PCR ratings has improved over time. For the PCRs completed between 1995 and 2000, OED confirmed the rating in 69% of the cases, downgraded 24%, and upgraded 7%. For the PCRs completed since 2000, the corresponding figures were: confirmed (77%), downgraded (12%) and upgraded (11%).

14. OED's project performance ratings are based on separate evaluations and ratings of four core evaluation criteria: (i) relevance, (ii) effectiveness, (iii) efficiency, and (iv) sustainability (see Box 1). The final project rating is determined by weighting the separate ratings of the four core criteria, and a descriptor is assigned (highly successful, successful, partly successful, or unsuccessful). The information in the PPERs and PCRs provides some evidence of whether ADB is achieving project success, i.e., development results at the project level. In addition to providing details on the inputs and outputs associated with the projects, the reports include some information on the associated outcomes.

Box 1: Core Evaluation Criteria

1. Relevance is the consistency of a project's impacts and outcomes with the government's development strategy, ADB's lending strategy for the country, ADB's strategic objectives at the time of approval and evaluation, and the adequacy of the design.
2. Effectiveness describes the extent to which the project outcomes have been achieved.
3. Efficiency describes, ex post, how economically resources have been converted to results, measured by the economic internal rate of return, cost-effectiveness, or other measures.
4. Sustainability considers the likelihood that human, institutional, financial, and other resources will be sufficient to maintain the outcome over its economic life.

Source: Compiled from OED *Guidelines for the Preparation of Public Sector Project Performance Evaluation Report*, 2005.

15. The purpose of this chapter is to (i) assess broad trends in project outcomes to determine whether the upward trend in ratings reported in the 2005 AER was maintained in 2006, (ii) present a summary of OED ratings of public sector projects by country and sector, (iii) explore whether there are consistent differences in the outcomes of ADF-funded and OCR-funded projects, and (iv) identify the characteristics of successful projects in key sectors with a view to learning lessons for future ADB operations.

16. In this chapter, projects rated as successful are defined as the sum of projects rated as highly successful, successful, and generally successful.[8] Projects rated as unsuccessful were clearly failures. While projects rated as partly successful fell short of their objectives, they achieved some development results.[9] The corresponding evaluations identified some problems related to effectiveness, efficiency, and sustainability. Thus, projects rated as partly successful were not included among the group of successful projects.

17. OED completed evaluations of ADF operations in 2001 and 2003.[10] A Midterm Report will be submitted to the ADF donors in late 2006. To provide some indication of the results being achieved by ADF-funded public sector projects, their success rates were compared with those of OCR-funded projects.

18. In response to a request from the 2004 Budget Review Committee, the 2006 AER attempts to identify some general lessons from successful experience. The following approach was used to select the sectors covered in this analysis: (i) ADB's lending for the sector is expected to continue to be significant as identified in the sectoral classification in the MTS II; (ii)

[8] PCR and PPER results are aggregated using the PPER ratings when both PCR and PPER ratings are available.
[9] The average economic internal rate of return for projects rated as partly successful was 7%.
[10] See: (i) ADB. 2001. *A Review of the Asian Development Fund I-V Operations*. Manila; and (ii) ADB. 2003. *A Special Evaluation of the Asian Development Fund VI-VII Operations*. Manila.

selected sectors will have more than 10 completed projects approved in the 1990s with a successful rating—this will provide a reasonable sample to identify generalizable lessons; and (iii) the analysis is restricted to public sector projects and does not include program loans, sector development programs, or private sector projects. The criteria used to select the sectors are described in Appendix 2.

19. Five sectors were selected for detailed analysis: (i) irrigation and drainage, (ii) power, (iii) water supply and sanitation, (iv) education, and (v) roads. All of these sectors were identified as Group I sectors in the MTS II, i. e., sectors in which ADB's operations are expected to grow in the future. For each sector, OED (i) reviewed the PPERs/PCRs for successful projects, related OED special studies, and OED's Assessing Development Impact series[11]; (ii) analyzed the material under seven broad headings to assess factors related to project success (characteristics of success in the sector, quality at entry, quality during implementation, performance of the executing agency/implementing agency, ADB's contribution to project success, exogenous factors, and cross-cutting themes); and (iii) developed a counterfactual by reviewing the PPERs and PCRs for some projects in the sectors that did not turn out to be successful and undertaking a statistical comparison of key indicators for projects that were rated successful and those that were not.

B. Trends in Achieving Success in Public Sector Projects

20. The overall trend in project ratings shown in Figure 1 is similar to that reported in the 2005 AER.[12] The probability of project success deteriorated during the 1970s, bottomed out in the early 1980s, and improved from 1987 onwards.[13] Projects that were approved from 1987 until about 1992 had outcomes that were less successful than projects approved previously. Sectoral composition had an impact on changing success rates over time. For example, agriculture, one of ADB's poorest performing sectors, accounted for 30% of rated projects approved in the 1970s, 36% in the 1980s, and 21% in the 1990s. The share of social sector and transport projects increased over time.[14] The weight of the generally poorly performing lines of credit declined from 14% in the 1970s to 4% in the 1990s. After controlling for sectoral and country variables, the analysis found that project success improved over time. About 80% or more of the projects approved in 1994 or later were rated as successful. However, at least 40 projects approved before 1998 are still ongoing and have not been rated in PCRs, let alone PPERs. Many of these projects have experienced delays and problems in implementation. It remains to be seen whether this upward trend in project success ratings will be sustained after these projects are completed and assessed.

21. ADF-funded projects approved from 1970 to 1997 were rated considerably below OCR-funded ones. Also, average ADF ratings were much more volatile. Figure 1 shows that since 1991: (i) the OCR and ADF ratings have converged, and (ii) both sets of ratings have improved markedly. Given the development challenges faced by ADF-eligible countries, this is a positive finding.

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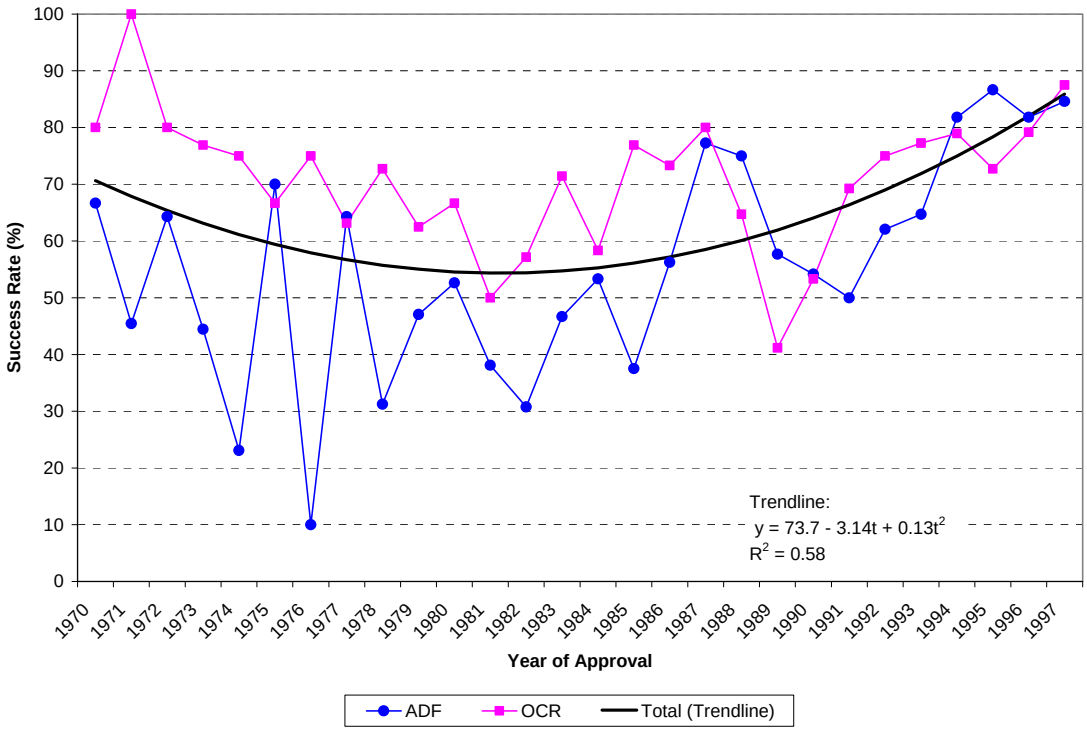
[11] This series covers energy, education, health care, roads, and water supply and sanitation.

[12] ADB. 2005. *2005 Annual Evaluation Review.* Manila, paras. 16 to 66.

[13] It is typically about 10 years from project approval to the time that a PPER is prepared. PCRs and PPERs are available for only 8% of projects approved after 1997. The sample of post-1997 projects for which the documents are available is likely biased toward the more successful projects, i. e., those in which there were no delays in implementation. Thus, the ratings of the projects approved after 1997 were not used in the analysis.

[14] Social sector: 15% in the 1970s, 20% in the 1980s, and 27% in the 1990s. Transport sector: 17% in the 1970s, 14% in the 1980s, and 21% in the 1990s.

Figure 1: Trends in Project Ratings by Source of Funding
(Combined PPER and PCR Results)



Source: OED

22. This pattern of evaluation ratings suggests that the design and/or implementation of ADB-funded projects has progressively improved, a possible indication of continued learning and the effectiveness of initiatives aimed at strengthening project quality. These issues were discussed in detail in the 2005 AER and are not repeated in this report, other than to note that these improvements apply to both OCR- and ADF-funded projects. However, several caveats about the improving trend toward better project success rates bear repeating: (i) there is a lack of data for more recently approved projects, since they are still under implementation—only 8% of projects processed after 1997 have been rated; (ii) there is a possible bias towards more positive interpretation of project success in later years, since the more recent ratings rely heavily on PCRs; and (iii) projects approved in the 1990s that have experienced long delays in implementation and have not been completed are likely to have a lower than average success rating. Thus, the sustainability of the improvement in project outcomes is somewhat uncertain.

C. Public Sector Project Outcomes—at Aggregate Level

23. An average of 6.6 years is required to implement an ADB-financed project. Nearly all projects approved after 1997 are still active and have not been evaluated. By the end of 2005, 980 completed projects (514 funded by ADF and 466 from OCR) had been rated,[15] of which 64% were rated as successful, 28% as partly successful, and 8% as unsuccessful.[16] Taking

[15] The rated projects accounted for 79% of the approved projects to end-1997.
[16] The success ratings improve somewhat if the projects are weighted by the amount of ADB funding used (72% successful; 24% partly successful; 4% unsuccessful). Ratings based on loan amounts are better than the ratings based on the number of projects, because large infrastructure projects are the most successful type of project funded by ADB.

ADB's operations as a whole, the pattern of ratings was somewhat different by source of funding, although for both ADF and OCR, majorities were successful (see Table 1). On average, OCR-funded projects were more likely to be rated as successful (70%) than ADF-funded projects (58%). Approximately one in five OCR projects and a third of ADF projects were rated as partly successful. Somewhat less than one in ten projects was rated as unsuccessful regardless of the source of funding. ADF is allocated to poorer countries, which often face daunting development challenges. Thus, at the aggregate level it should not be surprising that OCR-funded projects are more successful than ADF-funded ones, because they were concentrated in relatively more advanced DMCs. As to the failure rate (8.5%), there appeared to be very little difference among projects by source of funding.

Table 1: Evaluation Ratings of Projects, 1970-1997

Source of Funds	Percent of Projects in Each Rating Category		
	Successful	Partly Successful	Unsuccessful
ADF	58.0%	34.0%	8.0%
OCR	69.7%	21.2%	9.0%
Total	63.6%	28.0%	8.5%

ADF = Asian Development Fund, OCR = ordinary capital resources.
Note: Chi square = 20.0; significant at 1%.

24. As evident from Table 1, the overall project success rate of ADB is 64%. ADB does not have a target project success rate defined yet. It is therefore unclear whether the project success rate meets the expectations of ADB's shareholders and Management. As a point of reference, the World Bank has set 90% as its target project success rate.

25. One of the key elements in managing for development results is to set clear, monitorable targets to provide a benchmark against which to assess progress. ADB, as an institution, is just beginning to set such targets for development outcomes. Those will complement targets related to processing loans and TAs and some standard project implementation indicators (e.g., contract awards, disbursements). However, overall, ADB does not set targets that can be used to monitor the achievement of outcomes.

26. ADB should set a target against which to compare project success as reported in PCRs and PPERs. Targets for project outcomes should be developed within a broader context of targets that ADB should set for monitoring the achievement of development results. For project outcomes, what is being proposed is to set targets against which to compare aggregate PCR and PPER ratings. Since these ratings are produced as a matter of course in all PCRs and PPERs, this suggestion would not impose additional requirements on ADB or DMCs, and the target would not crowd out monitoring indicators and targets in the Project Performance Monitoring System. Care would be needed to ensure that a target set by Management did not result in a moral hazard by creating institutional incentives for "rating creep" in the assessment of completed projects. Given its independence, OED should not be affected by such considerations. In reviewing PCRs, OED pays particular attention to the project ratings to ensure that they are supported by the evidence in the PCR. If OED does not agree that the project rating is consistent with the evidence in the PCR, it does not endorse the rating. In such cases, the dispute on the rating should be recorded in a footnote in the PCR. In setting such monitoring targets, ADB should consult with the World Bank to learn how its system is working and whether World Bank management finds it useful. Harmonizing with the World Bank and

other multilateral development banks (MDBs) would be consistent with the attempts to develop a common performance assessment system.[17]

D. Project Success by Country Classification

27. As reported in the 2005 AER, project success varies by country, a finding that was confirmed by the analysis undertaken for this report. This finding reconfirms the importance of result-based CSPs, sound country knowledge, and country orientation of ADB's organizational structure.

28. Periodic reviews of the eligibility for, or graduation from, ADF normally coincide with the ADF replenishment exercise. Eligibility of a DMC to borrow ADF[18] resources is determined by its country classification: (i) Group A countries are eligible for ADF-only financing; (ii) Group B1 countries borrow primarily from ADF, with limited amounts from OCR;[19] (iii) Group B2 countries borrow primarily from OCR, with limited amounts from ADF; and (iv) Group C countries are eligible only for OCR financing. Graduated economies are no longer eligible for ADB support. The current country classification is based on the Graduation Policy that has been effective since 1999.

29. An analysis of project success by country and country classification is given in Table A3.2 in Appendix 3. The analysis confirms that project performance varies significantly across countries. Analyzing project performance by country grouping resulted in the following findings:

(i) Consistently high rates of project success, 85%-90%, were achieved in the graduated economies.
(ii) The project success rate for Group C countries fell from 66% for projects approved in the 1970s to 55% in the 1980s before increasing to 77% in the 1990s.
(iii) For Group B2 countries, project success increased modestly from 55% in the 1970s to 59% in the 1980s and then significantly to 68% in the 1990s.
(iv) Project outcomes improved markedly in Group B1 countries from a low of 40% in the 1970s to 60% in the 1980s and to 71% in the 1990s.
(v) For Group A countries, the success rate in the 1990s was 74%, the second highest among the country groups during that decade. This was a substantial improvement over the 50% recorded for projects approved in the 1970s and 58% in the 1980s.

30. The group averages mask important differences. In all groups, there were outliers. Development results achieved by some countries were much better than the average for their group; development outcomes were disappointing in other countries in the same group. The same pattern is clear when countries are compared in terms of eligibility to borrow ADF funds, particularly for projects approved in the 1990s. ADB's portfolios perform better in some countries that have access to ADF than in some OCR borrowers. Of course, the reverse is also true. For some OCR borrowers, projects are more likely to be successful than in ADF-eligible countries. Outcomes by country are discussed in Appendix 3, drawing on some CAPE findings.

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[17] ADB. 2006. *2005 Report of the MDB Common Performance Assessment System (COMPAS)*. Multilateral Development Bank Working Group on Managing for Development Results. Manila.

[18] ADF project loans generally have a 32-year maturity including a grace period of 8 years, a 1.0% interest charge during the grace period, and 1.5% during the amortization period.

[19] OCR funds are raised in the international capital markets. The interest rates for OCR project loans are floating lending rates that consist of the 6-month London interbank offered rate and a spread fixed 40 basis points over the life of the loan. A commitment fee of 0.75% per annum is levied on the undisbursed balance. The repayment term for an OCR loan is based primarily on the economic life of the project, typically 20 years following a grace period that is generally consistent with the period of implementation.

31. One important operational implication of the country classification, in addition to ADF access, is related to the allowable percentage limits of ADB financing. The allowable percentage financing declines from Group A to Group C. There is a school of thought that believes that country ownership of projects increases as a country's share of financing increase. This hypothesis was tested by comparing project success rates by percentage of the project costs financed by the executing agency (EA), after controlling for sector differences. No significant relationship was found. There was no clear pattern to suggest that project success improves with the share of government financing. Since the likelihood of project success is not compromised, it is reasonable for ADB to recognize the greater fiscal constraints faced by lower income countries by increasing the allowable financing limit.

E. Project Success by Sector

32. The 2005 AER found that project performance varied significantly by sector. This report extends that analysis by comparing the success ratings by sector and source of funding and by identifying the characteristics of successful projects. The likelihood of project success by sector is shown in Table 2 for both OCR- and ADF-funded projects and in Appendix 3, Table A3.3. These results confirm findings of the 2005 AER.[20] With some exceptions, the findings also indicate that OCR- and ADF-funded projects perform similarly in the same sectors. It is also evident from the table that ADF-funded projects show an upward trend in project success, converging with the success rate for OCR-funded projects for projects approved in the 1990s.

Table 2: Project Performance by Sector and Source of Financing
(% of Projects Rated Successful)

	ADF				OCR				Total			
Major Sector	1970s (%)	1980s (%)	1990-1997 (%)	Total (%)	1970s (%)	1980s (%)	1990-1997 (%)	Total (%)	1970s (%)	1980s (%)	1990-1997 (%)	Total (%)
Agriculture	36	53	52	47	41	38	52	42	37	47	52	46
Energy	68	80	87	78	87	77	86	84	78	78	87	81
Government-owned DFIs	0	31	63	26	67	82	29	64	42	52	47	46
Social Infrastructure	50	31	67	55	74	63	82	73	65	48	72	63
Transport and Communications	79	73	90	82	86	76	85	83	84	74	87	83
Industry	67	100	50	67	78	100	50	74	75	100	50	72
Multisector/Others	100	64	74	71			45	45	100	64	63	64
Total	46	54	69	58	72	63	74	70	60	58	71	64

ADF = Asian Development Fund, DFI = development finance institution, OCR = ordinary capital resources.
Source: OED.

33. ADB's experience in the **transport sector** has been good. The project success rate for this sector (83%) was the highest among all major sectors in the 1970s and 1990s. The success rating was high for both ADF- (82%) and OCR- (83%) funded transport projects. Road projects dominated the transport portfolio for both sources of funding, and the success rates were exceptional (87% for ADF and 91% for OCR). Project success was also high for port, airport, and telecommunications projects, regardless of the source of funding. While the success rates

[20] Given that ADB's project approach is largely common across sectors and countries, it should not be surprising that differences in outcomes reflect country- and sector-level issues. Ideally, the performance of ADB-financed projects in particular sectors and countries would be benchmarked against the performance of similar projects financed by other aid agencies. Unfortunately, such comparative data are not publicly available. In 2006, ECG decided to try to assemble a common data base that would permit such benchmarking to be undertaken in the future.

for projects in the transport sector were consistently good, the performance of the relatively small railway portfolio was considerably weaker than the other transport modes (33% for the three ADF-funded railway projects and 48% for the seven OCR-funded railway projects). Successful roads projects also experienced the following: (i) traffic growth was associated with economic growth; (ii) adequate levels of traffic used the completed roads; (iii) vehicle operating costs and journey times were reduced and transport services improved; and (iii) there was an adequate maintenance regime (see Appendix 4 for details).

34. Evaluations for ADB's **energy** portfolio have found generally good project outcomes. Energy projects have had high success rates—81% were rated as successful. The level of success improved over time—78% success rate for projects approved during the 1970s and 1980s; 87% for the 1990s. The good performance applied both to ADF- (78%) and OCR- (84%) funded energy projects. Power projects, which dominate ADB's energy portfolio, performed well regardless of the source of financing. Difficulties are sometimes experienced in complying with financial covenants and with ADB's environmental and resettlement safeguard policies in the energy sector, particularly for hydropower projects. Nongovernment organizations (NGOs) have raised concerns about these areas. In successful power projects (i) benefits were immediate once the projects were completed, due to existing excess demand; (ii) increased electricity supply facilitated economic growth and contributed to a better quality of life; (iii) financial policy dialogue and tariff reform helped to ensure sufficient funding for investment, operation, and maintenance; and (iv) there was a strong project management team in the EA that had learned lessons from previous projects (see Appendix 5 for further details).

35. Power sector restructuring is a complex process and often takes longer and is more difficult than is originally anticipated. A 2005 evaluation of ADB's power sector portfolio in the Philippines rated the performance as satisfactory for the period up to the late 1980s, when investment projects dominated ADB's assistance. Thereafter, when the focus of ADB's support shifted to power sector restructuring, difficulties were encountered and performance was rated as partly satisfactory.

36. **Social infrastructure** includes a diverse group of subsectors (urban development, water supply and wastewater treatment, sanitation, education, health and population). There were significant differences in project outcomes by source of funding. Of the ADF-funded social infrastructure projects, 55% were rated as successful. This was significantly lower than the 73% success rate for OCR-funded social infrastructure projects. Overall, the performance of social sector projects improved over time—65% of projects approved in the 1970s were rated as successful, 48% in the 1980s, and 72% in the 1990s. As shown in Table A3.3 in Appendix 3, the difference in project outcomes by source of funding was evident in all subsectors. In all cases, the success rates for ADF-funded projects were lower than for OCR-funded projects. Improved project success rates over time were evident for both ADF- and OCR-funded projects. Performance was variable across sectors. In this sector, urban development projects performed best, with a 71% (ADF: 57%; OCR: 86%) success rate, followed by education projects (69%—62% ADF; 86% OCR). Lower success rates were achieved for water supply/waste water treatment projects (50% ADF; 64% OCR) and health projects (42% ADF; 60% OCR).

37. The difficulties in achieving successful project outcomes in the social sectors were illustrated in the 2005 Pakistan Social Sector SAPE.[21] The performance of the social sectors is poor, and Pakistan's social indicators lag behind those of comparator countries. Although the government has expressed optimism that most of the millennium development goals (MDGs)

[21] ADB. 2005. *Sector Assistance Program Evaluation for the Social Sectors in Pakistan*. Manila.

are potentially achievable, this will require a turnaround from poor performance in the 1990s and faster progress than has been achieved in the past. In keeping with overall sector performance, and relative to the performance of operations in most other sectors in the country, the performance of ADB's social sector operations in Pakistan has been poor. According to the SAPE, only 8% of 24 social sector projects were rated as successful, 58% were judged as partly successful, and the balance (33%) were unsuccessful. Although the performance of more recently approved projects is better, the level of performance is not satisfactory, particularly in light of ADB's commitment to manage for development results. ADB finds itself facing a dilemma—on the one hand, it is committed to helping its clients achieve the MDGs, and on the other hand, to allocating resources in a way that will maximize the achievement of development results. A new ADB strategy is needed for social sector operations in Pakistan.

38. Lessons that can be drawn from successful water supply projects include (i) their positive impacts on intended beneficiaries, particularly women; (ii) technical innovation and a positive impact on the environment; (iii) proper operation and maintenance helped ensure long-run sustainability; (iv) the projects typically were run by financially self-sustaining water supply institutions, put in place water user committees, and adopted the "user pays" principle; and (v) projects were formulated through extensive consultations with local government staff and the local community, including NGOs. Further details are in Appendix 6.

39. A 2005 OED report evaluated ADB's health policy.[22] The evaluation found significant differences among DMCs in regard to their efforts to reduce the mortality rate of children less than 5 years old, the infant mortality rate, and the maternal mortality ratio. If present trends continue, only 12 countries are on track to achieve the reduction in the under-5 mortality rate that is targeted for 2015; only 5 countries are on track to achieve the targeted reductions in infant mortality; and only 13 countries are on track to achieve the desired reductions in maternal mortality, which means that more than half of the DMCs will not achieve this goal. The evaluation team tested the relationships among health status, incomes, and governance. It found a positive relationship with per capita income and a positive, although weak, relationship with the quality of governance. Some literature[23] recommends reforms to reduce corruption in the provision of health services, including allowing private provision of health care to curb the monopoly power of government service providers and limit the opportunities for bribery, and greater participation of the poor in deciding the allocation of public resources in the health sector. The OED report recommends that ADB link its Health Sector Policy and strategies more strongly to its Anticorruption Policy. The evaluation concludes that the principles of the Health Sector Policy remain relevant, and that ADB's adherence to and implementation of the Policy were satisfactory. More than 40% of DMCs spend less per capita than the $34 per annum that is the minimum necessary for basic health services. Nevertheless, ADB's lending in the health and population sector is a very small part (2–3%) of its total lending. The institutionalization of a Health Policy did not result in significant growth in ADB's health sector portfolio, and ADB remains a minor player in the health sector.

40. In the education sector, characteristics of successful projects included (i) participatory approaches were used for project design and implementation and to build alliances and shared ownership by engaging with a broad range of stakeholders; (ii) basic and secondary education projects are generally not able to recover costs, so adequate budgetary support is essential for project sustainability; (iii) technical, vocational, and higher education projects recovered some

[22] ADB. 2005. *Special Evaluation Study: ADB Policy for the Health Sector*. Manila.
[23] IMF. 2001. *Corruption and the Provision of Health Care and Education Services*. Working Paper No. 00/116. Washington.

costs and generated revenues; and (iv) cross-cutting themes, especially poverty reduction and gender concerns (see Appendix 7).

41. Access to financial resources is essential for the private sector to grow and prosper, and to intermediate the high savings rate in the Asia and Pacific Region. The ratings of projects in the **financial sector** reflect the performance of loans to government-owned development finance institutions (DFIs). There are clear differences in the performance of ADF- and OCR-financed lines of credit. Only 26% of the ADF-financed lines of credit were rated as successful. The performance of OCR-financed lines of credit was better—64% were successful. The OCR ratings are biased upward by the success of 11 lines of credit in graduated economies, approved in the 1970s and 1980s. Excluding these projects from the analysis results in a 52% success rate for OCR-funded lines of credit to government-owned DFIs.

42. Generally, the strength of financial institutions, depth of the financial markets and quality of regulation improve as countries develop. The evaluation findings suggest that ADB should refrain from financing lines of credit in ADF countries.[24] The risk of not achieving satisfactory development results in this area is unacceptably high. Beginning in the 1990s, there was a shift in ADB's operations in the financial sector. Fewer lines of credit were provided to government-owned DFIs. A broader range of products was offered, including program loans to support financial sector reform, lines of credit to commercial banks, equity investments in financial institutions, and capital market funds. These newer modalities are not covered by the forgoing analysis, because OED has evaluated only a limited sample of such operations. However, based on the available results, the performance of financial sector program loans has been better than the results for DFI lines of credit.[25]

43. The **agriculture sector** had the worst outcomes for both ADF- and OCR-financed projects. Only 46% of ADB-funded agriculture projects were rated as successful. The success rate for ADF-funded agriculture projects (47%) was marginally higher than that for OCR-funded ones (42%). For ADF-funded projects, the success rate exceeded 50% only for irrigation and rural development projects and for the small number of fertilizer plant projects supported by ADB. The best performing OCR-funded agriculture subsectors were irrigation and rural development and agricultural support services, both of which achieved a 50% success rating. The success rate for agriculture projects improved to 47% in the 1980s from 37% in the 1970s, but this trend toward better outcomes slowed in the 1990s, when the success rate reached 52%. The success rate for ADF-funded agriculture projects improved significantly from 36% in the 1970s to 53% in the 1980s and remained at that level for projects approved in the 1990s.

44. The difficulties of interventions in the agriculture and natural resources (ANR) sector were examined in the 2005 Lao People's Democratic Republic (Lao PDR) Agriculture and Natural Resources SAPE.[26] ADB's activities were rated as partly satisfactory. Problems experienced in ANR projects include (i) inadequate project design, including an inadequate understanding of the problems and opportunities viewed from the perspective of beneficiaries; (ii) project complexity; (iii) weak institutions; (iv) limited budgets; (v) adverse impact of external factors (e.g., climatic factors; declining farm gate prices through much of the 1980s and 1990s);

[24] This is consistent with the classification of such operations in Group III in the MTS II.
[25] Performance ratings are available for 25 program loans dealing with financial reforms and capital market development. Of these, 68% were rated as successful.
[26] ADB. 2005. *Sector Assistance Program Evaluation for the Agriculture Sector in the Lao People's Democratic Republic*. Manila.

and (vi) weaknesses in project administration.[27] These problems are pervasive throughout the agriculture sector and are experienced in both OCR- and ADF-funded projects. Nevertheless, since most poor people in the Asia and Pacific Region live in rural areas, ADB must find ways of achieving better results in those areas. It is not acceptable for only about one in two agriculture projects to be successful.

45. The livelihoods of about 80% of the population in the region depend, directly or indirectly, on the agriculture sector, and the sector remains important for virtually all DMCs. The root causes of the relatively poor performance of ADB's agriculture sector operations need to be thoroughly analyzed to identify ways of improving future performance. Despite the disappointing results of some agriculture projects, some ADB irrigation and drainage projects have achieved good results. When successful, such projects can bring significant gains to the beneficiaries. OED examined the evaluation findings for successful irrigation and drainage projects to help promote learning from successful projects in the hope that they can be replicated in the future (see Appendix 8). In irrigation projects, the key success factors were (i) an enabling policy environment; (ii) involvement of stakeholders and beneficiaries at all project phases, particularly operation and maintenance; (iii) participatory techniques to develop a sound understanding of the roles and responsibilities of farmers and water user associations and to create a climate in which participants are willing to pay irrigation fees; and (iv) adequate water supply reaching tail-end users, who are usually small farmers.

F. Common Characteristics of Successful Projects in the Five Core Sectors

46. Many factors contribute to project success. Some are project specific, some are sector specific, and some are country specific. Appendixes 4 through 8 summarize some lessons from the evaluation of successful projects in the road, power, water supply/sanitation, education and irrigation/drainage sectors. The analysis addresses the following issues in each sector: (i) characteristics of successful projects; (ii) quality at entry; (iii) quality during implementation; (iv) performance of the executing agency; (v) ADB's contribution to project success; (vi) exogenous factors; and (vii) cross cutting themes. Each appendix also includes a discussion on the counterfactual that contrasts some of the characteristics of successful and less than successful projects in the sector. Each appendix concludes with a box that identifies about 10 characteristics of successful projects. As would be expected, there was some variation in the characteristics across the sectors. However, the analysis also found that there were common themes that cut across sectors. The evaluation findings in the five core sectors examined were distilled to identify 10 common factors/characteristics that seemed to have contributed to good project performance (see Box 2).

47. The 10 main common characteristics relate to inputs from both ADB and DMCs at all stages of project preparation and implementation, and the role of EAs and DMC governments in ensuring project operation by providing necessary human and financial resources and enabling policy environments. Quality of project at entry, strong country ownership, flexible design and a participatory approach, ability to learn from previous experience and incorporate lessons in the project design, good supervision of project implementation, and strong project management units and related oversight institutions to ensure good performance and timely delivery from the contractors seem to be critical factors for project success. ADB should try to reflect these lessons in the design of future operations, as they appear to hold across sectors. The results of

[27] Increasing food production and declining food prices (in real terms) benefit consumers, including the poor. These consumer benefits are not captured in the economic internal rates of return calculated for agriculture projects.

a quantitative analysis to identify additional factors that are related to project success are reported in Chapter IV.

Box 2: Common Factors Contributing to Successful Projects

1. Strong ownership by governments and EAs was one of the key determinants of project success. Successful projects were consistent with government priorities.
2. A striking feature of successful projects was their ability to learn lessons from past experience and incorporate these lessons in the design of subsequent projects.
3. Careful project preparation and the quality of the feasibility study were important. Successful projects often considered alternative designs in the planning phase and identified potential problems and appropriate solutions. There was a clear unmet demand for the goods and services provided by successful projects.
4. A participatory approach with involvement of beneficiaries/stakeholders was adopted at all phases of many successful projects.
5. Successful projects tended to be implemented by strong EAs that operated in the right policy environment; were autonomous; had the necessary human resources and technical skills; and had access to adequate financing to implement, operate, and maintain the project. Fiscal sustainability and policy dialogue related to financial management and cost recovery from users were important.
6. EAs and ADB staff were able to identify and solve problems during the implementation of successful projects.
7. Consultants and contractors generally performed well in successful projects, which underscores the importance of procedures related to consultant recruitment and contract award and their supervision.
8. Institutional strengthening and training activities figured prominently in successful projects. Successful projects generally had satisfactory institutional impacts, which, in turn, contributed to achieving project outcomes/impacts.
9. Continuity of ADB's involvement in a particular country and sector improved the chances of success in follow-on projects, policy reform, and building institutional capacity.
10. Flexibility by ADB in allowing appropriate design changes, a proactive stance in solving problems, and making approvals in a timely manner were characteristics of successful projects.

Source: Compiled from Appendixes 4 to 8.

G. Importance of Project Success

48. One lesson from ADB's experience is that it makes an enormous difference to development if projects are successful or not. For ADF-funded projects rated as highly successful, the average economic internal rate of return (EIRR) was 31.1%, while the average EIRR for the group of projects rated as generally successful or successful was 17.4%. For the projects rated as partly successful and unsuccessful, the corresponding EIRR was only 7%, well below ADB's 12% cutoff for the return on capital. EIRRs for the group of OCR projects rated as highly successful and successful averaged 20%-22%, ex-post, the same range as the ex-ante estimates. The ex-ante EIRRs for OCR projects rated as partly successful and unsuccessful were also about 20%. However, the average ex-post EIRR for this group of projects was only 4.8%, an unacceptable outcome (see Appendix 9). These are not trivial differences. The EIRR is only one dimension of project success, and achieving development results goes well beyond what can be captured in an EIRR. Nevertheless, the EIRR is an important measure of the

efficiency of an investment. Extrapolated to a whole economy, such outcomes would make the difference between rapid growth and relative stagnation.

49. A finding that cuts across sectors is that less successful projects often experience significant delays in implementation. These projects are expensive for ADB in terms of staff time. They cost much more to manage. For example, highly successful ADF projects required, on average, 100 person-days of mission travel for project administration and about nine missions during implementation. Partly successful or unsuccessful projects required 170 person-days and about 12 missions. For OCR-financed projects the pattern was similar, although the level of inputs was lower. Over the project life, highly successful OCR projects required 77 days of ADB staff time on missions for project administration; the corresponding figure for projects rated as less than successful was 123.

50. Some of the factors associated with good project performance are related to good governance at the sector level. Good sector policies and strong institutions contribute to project success. Strong EAs are autonomous, subject to only minor levels of political interference and patronage, and have the necessary human resources and technical skills. Fiscal sustainability; adequate financing for project implementation, operation, and maintenance; and a participatory approach helped to achieve development outcomes.

51. Chapters III and IV explore other key factors that may influence project success, i.e., the achievement of development results of ADB operations at the project level.

III. GOVERNANCE AND OUTCOMES

A. Introduction

52. While it is difficult to find a consensus on the definition of governance, as it may mean different things to different people and in the context of different purposes, there seems to be a common understanding on what good governance constitutes. For example, the rule of law, a capable and honest public service, and a legal framework that respects property rights may be intrinsically important. They may also contribute to the efficient management of the development process and to the delivery of public services to people and businesses. These will facilitate economic growth and social development. It is also generally accepted that a lack of good governance breeds corruption. However the causal relationship between governance and other development outcomes is complex and not well understood, definitions of terms are diverse, and there are many measurement problems.[28] These factors make the quantitative analysis of governance less than fully reliable.

53. ADB recognizes the intrinsic importance of governance, and also the way it affects economic growth and other development outcomes. In 1995, ADB became the first MDB to adopt a governance policy. ADB adopted an anticorruption policy in 1998, and in 2000, a governance action plan. Defining governance as sound development management, ADB identified four elements that define the focus of its governance initiatives—accountability, participation, predictability, and transparency. The presence of these elements of good governance should reduce opportunities for misuse or misallocation of development resources. Good governance became one of the pillars of ADB's fight against poverty. Governance

[28] For a discussion of the measurement problems related to governance, see www.worldbank.org/wbi/governance/pubs/govmatters4.html. This website presents point estimates of six dimensions of governance as well as the margins of error for each country for five periods. It notes that these margins of error are an important feature of all efforts to measure governance.

assessments feature in several ADB operations-related processes and products: (i) poverty analysis; (ii) sector analysis; (iii) CSP preparation, including governance assessments; and (iv) the PBA policy to allocate ADF resources. ADB, the Organization for Economic Cooperation and Development (OECD), and 25 participating governments from the region work together on the fight against corruption in Asia and the Pacific.[29] Improving governance and preventing corruption are included as one of the five strategic priorities in the MTS II. However, a review[30] concluded that there are weaknesses in the implementation of both the governance and anticorruption policies (see Box 3). External commentators, including the Bank Information Center, have also pointed out shortcomings in implementing ADB's anticorruption policy.[31]

Box 3: Action Plan for the Governance and Anticorruption Policies

A review of the implementation of the governance and anticorruption policies concluded that (i) the policies cover too many topics, resulting in ADB's limited skills and resources being spread too thinly to effectively address systemic governance and corruption issues; and (ii) governance and corruption risks are not effectively mitigated at the sectoral level, where many of ADB's activities take place.

The action plan being developed to address these findings identifies public financial management, procurement, and anticorruption as priority areas. A risk management approach is proposed that relies on (i) sound upstream diagnostics and analysis during CSP preparation; and (ii) assessing public financial management, procurement, and anticorruption risks in areas where there are ADB-financed projects and programs. The action plan encourages joint country governance and sector diagnostics with other agencies and DMCs. The action plan is designed to improve transparency and accountability and to encourage working with civil society to assess, manage, and mitigate financial management, procurement, and corruption risks. Better disclosure and communications will be used to improve transparency. The need for stronger project supervision is emphasized.

Source: Based on work done by the Regional and Sustainable Development Department. December, 2005.

54. There are many definitions of governance in use.[32] Table 3 summarizes four definitions, three used by ADB and one by the Policy Research Department of the World Bank (generally associated with Kaufman, Kraay, and Zoido-Lobotan, or KKZ for short). As evident in the table, while the precise definitions and measurement may vary, good governance is related to rule of law, public sector management, control of corruption, and state-citizen relations. The governance subcriteria in ADB's country performance assessment (CPA) used in the PBA formula to allocate ADF resources (second column, Table 3) are very specific and exactly the same as those of the country performance and institutional assessment (CPIA) of the World Bank for allocation of IDA resources. On the other hand, ADB's governance criteria as spelled out in its website (third column in Table 3) are broad and for general purposes. The criteria used

[29] See www.adb.org/anticorruption.
[30] ADB. 2005. *Review of the Implementation of ADB's Governance and Anticorruption Policies: Findings and Recommendations*. Third Draft, 21 December 2005. Manila.
[31] http://www.bicusa.org/bicusa/issues/asian_development_bank/2567.php
[32] In general, governance refers to the relationships between governments and citizens that enable public policies and programs to be formulated, implemented, and evaluated. In the broader context, it refers to the rules, institutions, and networks that determine how a country or an organization functions. In terms of how the concept has evolved over time, four types of governance are specified: (a) procedural governance (i.e., the traditional bureaucratic manner of doing things), (b) corporate governance (i.e., governance that is goal driven, and where plans are the primary form of control over managerial action), (c) market governance (i.e., governance that relies on competition and where contracts are the controls), and (d) network governance (i.e., governance that relies on networks and coproduction). (Source: G. Bhatta, *International Dictionary of Public Management and Governance*, New York: M. E. Sharpe, 2006, pp. 252-253).

Table 3: Definitions of Governance

Governance Sub-Criteria (ADB PBA[a] 2004)	Governance Sub-Criteria (ADB and World Bank PBA[a] 2005)	Governance Criteria (ADB Website[b] 2006)	Governance Sub-Criteria (World Bank Research Branch, KKZ Index)
Rule of law	Property rights and rules-based governance		Rule of law
Anticorruption and accounting institutions	Transparency, accountability, and anti-corruption	Transparency and predictability	Control of corruption
		Accountability	Regulatory quality
Civil service	Public Administration	Efficiency and effectiveness	Government effectiveness
Revenue mobilization and budget management	Revenue mobilization		
Management and efficiency of public expenditures	Budgetary and financial management		
Governance and public sector management			
			Political stability
		Participation	Voice and accountability

[a] For performance based allocation of ADF and IDA resources; see also *2005 Annual Report on ADB's Country Performance Assessment Exercise*, March 2006.
[b] www.adb.org/governance.

in the KKZ data set, which is the standard source used by most researchers on governance, includes "perception" data on governance from 37 different sources constructed by 31 different organizations. Data sources include cross-country surveys of firms, commercial risk-rating agencies, think-tanks, government agencies, and international organizations. In total, 352 proxies for various dimensions of governance are included in the KKZ data set.

55. A recent OECD report concluded that, while the KKZ data base was the most carefully constructed and widely used set of governance indicators, there were some problems associated with the indicators: "i) the likelihood of correlation of error among the 37 sources from which the composite … indicators are constructed, which significantly limits the statistical legitimacy of using them to compare country scores; ii) their lack of comparability over time; iii) sample bias; and iv) insufficient transparency."[33] Although the KKZ indicators are widely used in regression analysis, because of these issues, the OECD report raises a note of caution regarding such analysis. However, that report also uses the KKZ variables in some regression analysis.

B. Country Governance and Economic Growth

56. At the end of the 1990s, as part of the rethinking that followed the Asian financial crisis, several researchers came to the conclusion that the policy and institutional environment was a key determinant of economic growth, and causality was generally thought to flow from better

[33] Arndt, Christiane and Charles Oman. 2006. *Uses and Abuses of Governance Indicators*. Paris: Development Center of the Organization for Economic Co-operation and Development. page 49.

governance to improved development performance.[34] However, the empirical research that supported this conclusion was challenged and recent research has not found robust relationships among governance, aid flows, development effectiveness, and economic growth.[35] A recent OECD report concluded that: "Current governance indicators are highly positively correlated with measures of current national product per capita. The challenge is to identify the direction(s) of causality in the relationship between the quality of governance and the level of income in a country. We find that beyond the limitations inherent in the construction of most governance indicators used for such analysis, research based on those indicators often produces results that are very sensitive to changes in the econometric model used — the variables in the model and its underlying assumptions …"[36] In other words, the findings are not robust. The OECD report mentions some studies that conclude that: (i) good governance promotes economic growth but that growth does not necessarily promote good governance; and (ii) that some countries with poor governance have achieved strong, long term economic growth, particularly in Asia (e.g., the PRC and the Asian tigers).

57. Work undertaken by OED in 2005 examined the effects of governance on development outcomes. An OED study, as part of its evaluation of ADB's policy for the health sector, examined the effects of governance on infant and maternal mortality.[37] The results of a regression analysis of the relationship among infant mortality rate, maternal mortality ratio, income levels, and governance undertaken for that evaluation found that an improvement in per capita income was associated with improvements in both maternal and child mortality. Better governance was also associated with fewer deaths of mothers and children, although the relationship was weaker.

58. An ADB research paper on the effect of development aid on poverty reduction,[38] to which OED staff contributed, concluded that the macro policy environment and the quality of governance are important factors that contribute to the reduction of poverty. However, aid effectiveness is not critically contingent on them. On average, aid has been effective in a wide variety of policy environments and qualities of governance.

59. A 2005 OED working paper[39] analyzed, using a quantitative assessment, the influence of governance on economic growth in developing Asian economies. Although Asia is the fastest growing economic region in the world, the KKZ governance indicators suggest that the state of governance in many countries is comparatively weak. The study concludes that most DMCs have a governance deficit; in other words, they generally lack good governance. The analysis does not find a strong positive link between good governance and strong economic growth. Some countries with relatively good governance have lower growth rates than countries with a governance deficit. Using a different methodology, a recent Economics and Research

[34] See: (i) Burnside, Craig and Dollar, David. September 2000. Aid, Policies and Growth. *American Economic Review*. 90(4), pp. 847-68; ad (ii) World Bank Institute. 15 May 2006. *Development and Uses of Governance Indicators*. Massimo Mastruzzi. Keynote Presentation at the DAI All-Staff Conference. Washington, DC. www.worldbank.org/wbi/governance.

[35] Rajan, R. and Subramanian (2005). *Aid and Growth: What Does the Cross-Country Evidence Really Show?* IMF Working Paper No. 05/127; and *What Undermines Aid's Impact on Growth?* IMF Working Paper 05/126.

[36] OECD, *op. cit*., page 77.

[37] ADB. 2005. *Special Evaluation Study on ADB Policy for the Health Sector*. Appendix 7. Manila.

[38] Asra, Abuzar, Gemma Estrada, Yangseon Kim, and M. G. Quibria. 2005. *Poverty and Foreign Aid Evidence from Recent Cross-Country Data*. ERD Working Paper No. 65. Manila: ADB.

[39] Quibria, M. G. 2005. *Does Governance Matter? Yes, No or Maybe – Some Evidence from Developing Asia*. OED Working Paper No. 2. 31 March. Manila. (also *Kyklos*, Vol. 59, 2006, No. 1, 99-114.)

Department (ERD) paper[40] examined the effects of institutions and policies on economic growth and poverty, particularly institutions and policies related to the enabling environment for the private sector. The paper found that good governance, as measured by a strong commitment to the rule of law, a competent and efficient government sector, and control of corruption, facilitates the creation of new enterprises and per capita income growth. However, the paper did not find a statistically significant relationship between good governance and poverty reduction. Rather, the impact of good governance on reducing poverty was indirect, coming through economic growth.

60. The OED working paper found a correlation between governance and per capita incomes at purchasing power parity.[41] Good governance is associated with higher per capita incomes. But there was no clear correlation between current measures of governance and economic growth. It may be that changes in the measures of governance, rather than the level, have a greater impact on short- to medium-term economic growth. Although there is a debate in the literature about the relationship between good governance and variables like the rate of economic growth and poverty reduction, one important relationship is clear—there is a strong correlation between governance and the level of development (see the OED working paper[42] and the material in Appendix 10, Figures A10.1 to A10.6). The analysis undertaken for this review failed to find significant correlations between the six KKZ governance indicators and the rate of economic growth over the 1996-2004 period. Good governance, political stability, government effectiveness, rule of law and control of corruption did not result in faster economic growth over this 8 year period (see Appendix 10, Figures A10.13 and A.10.14).

61. Although the relationship between the level of economic development and governance variables is strong when the worldwide data base is used covering both developed and developing countries, the relationship is weaker for countries in which the per capita gross domestic product (GDP) is lower that $5,000 (Appendix 10, Figures A10.7 to A10.12).[43] All DMCs that currently borrow from ADB are in this category (see Table 4).

62. The apparent disconnect between governance and level of development in Asia was summarized as follows in the OED working paper:

"*To sum up, notwithstanding the tremendous economic achievements of developing Asia, the state of governance in these countries—if measured by the KKZ composite index, a popular index of governance—is in no way stellar by international comparisons. Indeed, a large majority of developing countries in Asia, according to this indicator, seem to suffer from various degrees of governance deficit, compared to the international averages, relative to their incomes. What is apparently highly paradoxical is that countries that exhibit deficit in their governance indicators on average register a much higher growth on a sustained basis compared to those that exhibit a deficit. This of course suggests two possibilities. Either the link between governance and strong economic performance is not as strong as is widely presumed. There may be other complementary factors that need to be combined with governance for growth to happen. Or, alternatively while governance and economic performance are strongly correlated, the*

[40] ADB. Hasan, Rana; Mitra, Devashish; and Ulubasoglu Mehmet. *Institutions and Policies for Growth and Poverty Reduction: The Role of Private Sector Development*. Economics and Research Department Working Paper Series No.82. July 2006. Manila.

[41] Quibria*, op.cit.*, "The estimated regression is given by governance = -5.64 + 0.67 ln (GDP per capita). The coefficients of the regression are significant at the 1% level and the R^2 is 0.71." Page 12.

[42] *Ibid*.

[43] The worldwide data base includes 133 countries with a GDP per capita below $5,000 in 2004 and 74 countries above this cutoff point.

conventional measures—such as the KKZ composite index—fail to capture the nuances of governance that are critical to the development process. If that is the case, one should handle these indices with care—and refrain from their indiscriminate and mechanical use, particularly when it comes to important policy matters."[44]

Table 4: Relationship between GDP per Capita and Governance Indices

KKZ Governance Indicators	Worldwide GDPPC Data (All Countries)				Countries with GDPPC less than $5,000			
		Y = a +b(ln [GDPPC])				Y = a +b(ln [GDPPC])		
	Correlation Coefficient	Intercept (a)	Coefficient (b)	R^2	Correlation Coefficient	Intercept (a)	Coefficient (b)	R^2
Voice and Accountability	0.65 [a]	-3.10	0.39 [a]	0.42	0.43 [a]	-2.90	0.36 [a]	0.19
Political Stability	0.73 [a]	-3.46	0.43 [a]	0.53	0.47 [a]	-3.20	0.39 [a]	0.22
Government Effectiveness	0.85 [a]	-4.05	0.51 [a]	0.72	0.58 [a]	-2.89	0.33 [a]	0.34
Regulatory Quality	0.78 [a]	-3.71	0.47 [a]	0.61	0.46 [a]	-2.72	0.32 [a]	0.21
Rule of Law	0.85 [a]	-4.01	0.50 [a]	0.72	0.55 [a]	-2.94	0.34 [a]	0.30
Control of Corruption	0.83 [a]	-3.95	0.50 [a]	0.69	0.50 [a]	-2.31	0.25 [a]	0.25
Average Governance Index	0.72 [a]	-3.70	0.47 [a]	0.71	0.57 [a]	-2.83	0.33 [a]	0.32

GDPPC = gross domestic product per capita, ln = natural logarithm.

[a] Significant level 1%.

Note: In this report, relationships that are significant at the 1% level of confidence are termed strong relationships. Significance at the 5% level of confidence are labeled moderately significant. Relationships that are significant at the 10% level are labeled weak.

Data Sources: Daniel Kaufmann, Aart Kraay and Massimo Mastruzzi (2005). Governance Matters IV: Governance Indicators for 1996-2004". World Bank Policy Research Department Working Paper.
United Nations National Accounts Main Aggregates Database at http://unstats.un.org/unsd/snaama/dnllist.asp.

Source: OED

C. Country Governance and Project Performance

63. An aspect of the governance/economic growth relationship that is particularly important to ADB is whether country-level governance influences the success rate of its projects. This is a difficult question for research, because it is difficult to find countries that have different levels of governance but are otherwise comparable; statistical controls cannot solve all the problems of interpretation. It is also important to distinguish between governance in the macro context (i.e., rule of law, transparency, prevalence of corruption, fiscal management, etc.) and governance at the sectoral (e.g., sectoral legal/regulatory framework) or micro (corporate governance; project management; EA institutional capacity) levels. Governance variables in the KKZ data bases, and as used in the PBA formula, are macro level indicators. Sectoral and micro level governance indicators are not readily available. The latter include issues of sectoral policies and institutional structures, management autonomy and financial performance of independent agencies, methods of stakeholder participation in project design, etc. These may have more of an impact on project success than the broader dimensions of governance. If so, it would not be surprising if the governance-lending relationship turned out to be weaker than expected when the analysis is based on macro governance variables.

64. The effects of various dimensions of governance on project performance can also be difficult to identify. Over the past decade there have been various attempts to quantify these effects. For example, Isham and Kaufmann[45] used EIRRs from evaluated World Bank-funded

[44] Quibria*, op.cit.*, page 20.

[45] Jonathan Isham and Daniel Kaufmann, "The Forgotten Rationale for Policy Reform: The Productivity of Investment Projects." 1999. *Quarterly Journal of Economics* 114 (1): pages 149-184.

investments to investigate how country characteristics and a range of policy variables[46] influence aggregate performance and affect investment productivity. Three levels of confidence—1%, 5%, and 10%—were used to interpret the results and judge the statistical significance of the findings. They found that investments perform better, on average, in countries with undistorted macroeconomic, exchange rate, trade, and pricing policies. Their conclusion was that no type of project can be insulated from poor policies. They found that the quality of policies can make a difference to returns on investments of about 10 percentage points. The paper concludes that the likelihood and incidence of poor economic policies was not sufficiently taken into account during project formulation. It is likely that the same observation would apply to ADB-financed projects. These findings were robust and remained significant when various control variables were added to the model and when other tests for possible biases in sample selection were undertaken. Good macroeconomic policies are a key element of many measures of governance, although the precise way of measuring such variables varies across the different governance measurement systems.[47] These findings suggest that there should be a relationship between governance and the performance of ADB projects, a hypothesis that is examined in this report.

65. More recently, Dollar and Levin[48] explored the topic further, confirming a relationship between the policy environment and project success and going on to explore what particular types of policies might be important to the success of particular types of development projects. They introduced microeconomic evidence on factors conducive to the success of aid-funded projects in developing countries. The authors used the success rate of World Bank-financed projects in the 1990s, as determined by the World Bank Operations Evaluation Department, as their dependent variable. They found that the existence of high-quality institutions in a recipient country raises the probability that aid will be used effectively. They disaggregated the success rate of World Bank projects by lending instrument type and by investment sector, finding that different institutions are more important for different types of projects. While the rule of law and property rights are important for investment loans, democratic political institutions facilitate program loans. They concluded that "The finding of a strong relationship between institutional quality and project success serves to provide further support to the hypothesis that aid effectiveness is conditional on institutions and policies of the recipient countries." The situation in Asia may be different, as the study points out that geography matters.

66. OED examined the relationship between project success[49] and governance as defined in the KKZ governance ratings. Since the KKZ measures of governance are available only for 1996, 1998, 2000, 2002, and 2004, the analysis used the project success rates for 366 projects approved in the 1990s that had been completed and rated.

1. Governance and Country Portfolio Performance

67. Project success rates for each country on a portfolio basis were compared with the average scores on the six KKZ governance indicators over 1996-2002, the period covered by

[46] These included the black market premium for the local currency both over time and at the time of project approval, the fiscal deficit, an index of trade restrictiveness, an index of price distortions, real interest rates, capital/labor ratio, education of the working age group, project complexity, changes in terms of trade, GDP growth rate, total investment as a percentage of GDP, and the ratio of public investment to GDP investment.

[47] Despite these findings, for some projects there may be a micro/macro paradox. Badly governed economies tend to be highly distorted, and those distortions create opportunities for individual interventions that can attain high EIRRs and be evaluated as highly successful, essentially by fixing the distortion.

[48] David Dollar and Victoria Levin, *Sowing and Reaping: Institutional Quality and Project Outcomes in Developing Countries*. World Bank Research Working Paper No. 3524, 2005.

[49] Project success was defined by PPER ratings when they were available for the project or by ratings in PCRs if not.

most of the PPERs and PCRs (see Table A10.1 in Appendix 10). The only strong relationships were a negative correlation between voice and accountability and a positive correlation between political stability and project success. Given Dollar and Levin's conclusions, it is important to note program loans were not included in the universe used for this analysis. Moderate relationships were found between government effectiveness and regulatory quality and project success. Control of corruption was positively related to successful project outcomes, but the relationship was weak. The rule of law, one of the two variables for which ADB DMCs exhibited a skewed distribution, was not significantly related to average success ratings at the country level.

68. With the exception of voice and accountability, all signs were positive, i.e., the better the quality of governance, the higher the likelihood of project success. It is not clear why there should be a negative relationship between voice and accountability and project success. Eight of ADB's best performing portfolios are in countries that score lower than average on voice and accountability ratings (viz., Bhutan, Cambodia, PRC, Kazakhstan, Kyrgyz Republic, Maldives, Malaysia, and Viet Nam), although there are three other countries with good performing portfolios that score well on this criterion (viz., Fiji, Republic of Korea, and Thailand). Similarly ADB's five weakest portfolios are in countries that score above average on this dimension of governance (viz., Kiribati, Republic of the Marshall Islands, Papua New Guinea, Philippines, and Samoa).

69. Because of the nature of the data and the wide range of scores on project ratings and voice and accountability, various models were tested including deleting outliers[50] to assess the stability of this relationship. The resulting relationship between project success and voice and accountability was not statistically significant. After the outliers were removed from the data base, there was a moderately strong relationship between project success and political stability, government effectiveness, and control of corruption. There was a weak relationship, significant at the 10% level of confidence, between regulatory quality and rule of law, and project success.

70. The KKZ voice and accountability indicator includes a number of measures related to the political process, civil liberties, political and human rights, and the extent to which citizens are able to participate in the selection of governments.[51] ADB defines governance as sound development management, which does not cover political processes or human rights. Thus some of the criteria used in developing the voice and accountability ratings are not covered by ADB's governance policy. However, participation is one of the dimensions included in ADB's policy on governance. There is some evaluation evidence suggesting that, if effectively done, consultation and participation can lead to better project outcomes. The analysis of lessons from successful projects presented in Chapter II and in Appendixes 4–8 found that participation during project design and implementation contributed to good project performance and that participation was sometimes lacking in projects that turned out to be partly successful or unsuccessful. A recent evaluation of the involvement of civil society organizations in selected ADB operations also concluded that their involvement sometimes contributed to successful outcomes.[52] Although OED has not done a rigorous evaluation of the impact of participation on project success, some evaluation evidence suggests a positive relationship. Further research is

[50] The outliers included Bhutan, Kiribati, Maldives, Marshall Islands, and Viet Nam. Some runs included the graduated economies and some did not.

[51] One study found a strong and consistent link between measures of the extent of civil liberties in a country and the performance of World Bank-supported projects. (See: Pritchett, Lant and Kaufmann, Daniel. *Civil Liberties, Democracy and the Performance of Government Projects*. Finance and Development. March 1998.)

[52] ADB. 2006. *Special Evaluation Study on the Involvement of Civil Society Organizations in ADB Operations*. Manila.

needed to reach a firm conclusion on this relationship. Based on the evidence at hand, it would not be correct to conclude that voice and accountability detract from project success.

2. Governance and Performance of Individual Projects

71. Further analysis was undertaken to explore the relationships between governance and the success of individual projects—success at the micro level. A logit regression was used to assess the strength of the relationship of the six dimensions of governance after controlling for sector (see Table A10.1 in Appendix 10). There was a moderate relationship between political stability and the likelihood of project success. The relationship of the other dimensions of governance to achieving development outcomes was not statistically significant. This finding suggests that political stability is an essential prerequisite for project success. OED findings are broadly consistent with this conclusion. The outcomes of ADB projects in countries with political stability (Bhutan, PRC, India, Republic of Korea, Malaysia, Thailand, and Viet Nam) were generally good. The performance of ADB's portfolio deteriorated before and immediately after periods of political instability in the 1970s, 1980s, and 1990s in some countries (Bangladesh, Indonesia, Nepal, Pakistan, Papua New Guinea, and Philippines). ADB does not include political stability among its governance indicators or make any formal attempt to assess this issue in CSPs.

72. In general, the relationships between governance variables and the achievement of development outcomes at the project level were not strong, and there are wide variations between project success at the country level and governance scores (see the scatter plots in Figures A10.7 to A10.12 in Appendix 10). However, there is evidence of moderate to weak relationships between most dimensions of governance and project success at the country level (see also Chapter IV). These findings suggest that various dimensions of governance may be related to achieving development results, although other factors are also important, perhaps more so than governance.

73. A logit regression was used to assess the relationship among the success of individual projects, the six KKZ governance variables, the sector, and the economic growth rate. At the 5% level of confidence, voice and accountability was negatively, and control of corruption was positively, related to project success. These results give some analytical support to the proposition that controlling corruption helps to improve development results and helps to explain project success or failure after controlling for the influence of sectors.

74. Logit regressions were also run for subsets of projects classified by sector to examine whether the six governance variables were related to project outcomes at the sectoral level. In general, the relationships between macro level governance variables and project success within a sector were not significant. Several conclusions are possible: (i) macro level governance variables do not reflect binding constraints for project success; (ii) the errors in measurement preclude meaningful analysis; (iii) unquantified sectoral variables are more important drivers of project success than macro level governance variables; and/or (iv) measures incorporated into project selection and design and implementation overcome many of the problems related to poor governance. Further research is needed to test these competing hypotheses.

3. Conclusions Regarding Governance and Project Success

75. Given the foregoing results, it appears that the relationships between national governance indicators and project success for ADB's portfolio are somewhat weaker than has been reported in some of the literature. This may reflect the wider range of countries covered by

World Bank lending and thus a wider range of variation among countries, or differences in the variables used to measure governance. Nevertheless some evidence was found to suggest relationships between some dimensions of governance and project success. However, it is not clear how strong or robust the relationships are. Many other variables that impact on project success were not included in the analysis. It is not clear if governance variables would still be significant explanatory variables for project success if these omitted variables were considered. The robustness of the relationships between the governance variables and project success is further examined in Chapter IV, in which a larger range of variables is included in the model to explain project success. All that can be concluded from the analysis in this chapter is that there is some evidence that good governance contributes to project success, but that the results are not analytically strong. The definitions and measurement of governance and project success need improvement before the relationships, or lack thereof, will be apparent. The action plan following the review of the implementation of the governance and anticorruption policies recommended that ADB focus more on governance issues at the sector level. This approach may tighten the relationship between governance and good project performance. However, given the definitional and measurement problems, and the likelihood that approaches will vary by sector and country, analytically demonstrating the causal linkage between governance and the achievement of development results will remain a challenge.

76. These findings on the development effectiveness and the quality of governance/institutions are rather inconclusive, which basically confirms prior research on governance and growth using the same data base. There are two standard interpretations of the results: either (i) the linkage between governance and growth and the achievement of development results is indeed weak, or (ii) the quality of the KKZ and other macro governance indicators need strengthening.[53] The ongoing debate in the literature, plus OED findings, suggest that there remain uncertainties about the measurement of governance and the linkage of the current measurements of governance to the achievement of development results (see further analysis of project success factors in Chapter IV).

D. Evaluation Feedback on Corruption

77. Up to one third of development investment in some member countries is wasted.[54] From a development perspective, some economists have argued that corruption affects income distribution but leaves economic growth unaffected.[55] However, it seems clear that corruption adversely affects economic growth in a number of ways. It can siphon resources away from the poor and out of the country. It can skew investment towards luxury goods. It can hamper business by creating a thicket of rules and regulations that create opportunities for bribes. It can contribute to cronyism and the creation of monopolies and oligopolies. It can result in projects costing more than they should, substandard construction, and poor operations and maintenance. Systematic corruption embedded in the structure of government is difficult to reverse and builds expectations of corrupt earnings.

[53] Sources: (i) Olson, N. Sarna, and A. Swamy. 2000. *Governance and Growth: A Simple Hypothesis Explaining Cross-Country Differences in Productivity Growth.* Maryland: Department of Economics, University of Maryland; (ii) Knack, Stephen. 2002. *Governance and Growth: Measurement and Evidence.* February; (iii) Quibria, M.G. 2005. *op. cit.*; (iv) Development Center OECD. 2006. *op. cit*.

[54] Geert van der Linden, ADB and OECD, "Knowledge, Commitment and Action Against Corruption in Asia and the Pacific", 5th Regional Conference on the ADB-OECD Anti-Corruption Initiative for Asia and the Pacific, Beijing, PRC, September 2005, pages 28-32.

[55] For a broader view, see Patrick Keilers, "Corruption, Poverty and Development", Chapter 2.

78. All multilateral development institutions have begun to more actively fight against corruption in the new millennium. The ADB-OECD Anti-Corruption Initiative for Asia-Pacific now includes 25 countries. In December 2003, the United Nations Convention Against Corruption was promulgated. In February 2006, the African Development Bank, ADB, Inter-American Development Bank, European Investment Bank, European Bank for Reconstruction and Development, International Monetary Fund (IMF), and World Bank Group announced a consensus on the policies and practices necessary to address both internal and external problems of corruption. They agreed to standardize their definition of corruption, to improve the consistency of their investigative rules and procedures, to strengthen information sharing, and to ensure that compliance and enforcement actions taken by one institution are supported by the others. A task force was created to develop a uniform Framework for Preventing and Combating Fraud and Corruption, and proposals are being developed to assist their member countries over the longer term to strengthen their capacity to prevent corruption. Controlling corruption is one of the corporate priorities in ADB's MTS II.

79. In the 2004 PBA formula for ADF resources, ADB used "anticorruption and accounting institutions" as one of the governance criteria. In 2005, ADB changed the criterion to "transparency, accountability, and corruption." The pair-wise correlation coefficient between the country performance scores on these two criteria in adjacent years was only 0.63. Therefore, assuming that the extent and severity of corruption in the ADF countries did not change significantly in a single year, the people assigning country scores on the two criteria must have perceived the criteria to have changed significantly. This is a problem with composite criteria. In the 2004 criterion, anticorruption was linked with "accounting institutions," and in 2005, it was linked with "transparency and accountability." These may be related concepts, but they are not the same.

80. In the past, evaluation work did not discuss corruption issues. However, in 2005 some OED studies considered the effects of corruption on development.[56] Some findings are summarized below.

81. **Philippine Power Sector**.[57] According to surveys of the business community and surveys undertaken by research organizations, corruption is perceived to be widespread in the Philippines. Corruption has become a deterrent to foreign and domestic investment in the country. The perceived corruption poses a risk to the reputation and credibility of ADB as the lead development partner with a major exposure to the Philippines' power sector. Corruption might have several adverse impacts on power sector projects, including those supported by ADB, such as creating overcapacity, raising project costs, causing project delays, and contributing to poor quality works and maintenance. To help examine the risk of corruption, as part of the Philippine power sector assessment, Transparency International–Philippines was engaged to (i) identify potential sources of corruption in the power sector; (ii) conduct a preliminary assessment of the scale of corruption in the sector and its impact on project costs,

[56] See: (i) *CAPE for Indonesia*, at http://www.adb.org/Documents/CAPES/INO/2005-16/cap-ino-2005-16.pdf Chapter IV. A, page 17 and Appendix 9, page 132; (ii) *Technical Assistance Performance Evaluation Report on Capacity Building to Support Decentralization*, pages 14-15 at http://www.adb.org/Documents/Reports/IN15-06.pdf; (iii) *SAPE of ADB Assistance to the Philippines Power Sector*, Chapter VI. C, pages 40-42 and Appendix 7 page 95 at http://www.adb.org/Documents/Reports/ SAPE/PHI/SAP-PHI-2005-09.pdf; and (iv) *SES on ADB Policy for the Health Sector*, II. E, pages 11-12 and Appendix 8 at http://www.adb.org/Documents/Reports/Evaluation/sst-reg-2005-04.pdf.

[57] Adopted from ADB. 2005. *Sector Assistance Program Evaluation of Asian Development Bank Assistance to Philippines Power Sector*. Manila.

implementation, and operation; and (iii) recommend procedures and measures for ADB and the government to strengthen their fight against corruption.

82. The main findings are as follows. Despite the lack of firm evidence of corruption in the strict legal sense in the cases reviewed, the perception is that corruption in the power sector is deeply rooted. Breaches of rules and regulations, and higher unit costs in some projects compared with international benchmarks support this perception. Based on the information gathered by the study, the allegation of corruption appears to be most frequent for public sector generation projects or the award of contracts for independent power producers. While corruption potentially occurs at all stages of a typical project cycle, most alleged corruption occurred at tendering/bidding and privatization implementation stages.

83. The study made a series of recommendations for the government and ADB to combat corruption in ADB-supported projects. The underlying principle for the recommendations is Keep It Simple and Transparent. The government should make information on transactions of its agencies more transparent and available to the public. If a freedom of information act were enacted, ordinary citizens would have greater access to information to help fight the war against corruption. Consistent with the recommendations, ADB is revising its Guidelines for Procurement to mandate that borrowers publish detailed bid evaluation and contract award information. ADB and the government should use the framework in Figure 2 to identify more clearly the risk of corruption at each stage of the project cycle, and design mitigating measures. Similar analysis could be done to identify potential risks of corruption at the various stages of the project cycle in other sectors. Building checks and balances into the system is likely to be a double-edged sword. On the one hand, more checks and balances can make potential corrupt practices more difficult. On the other hand, they will provide more decision-making discretion to officials, and thus create more opportunities for corruption. For countries where corruption is entrenched, the balance should be tilted toward less regulation, simpler procedures, and greater transparency of information. The capacities of NGOs and civil society organizations in understanding ADB procurement principles, guidelines, and sector technicalities for major sectors (e.g., power, roads, water supply) should be developed through training sessions or seminars. ADB staff are beginning to provide such training. NGOs should be encouraged to monitor ADB projects and to report allegations of corruption to ADB and the media.

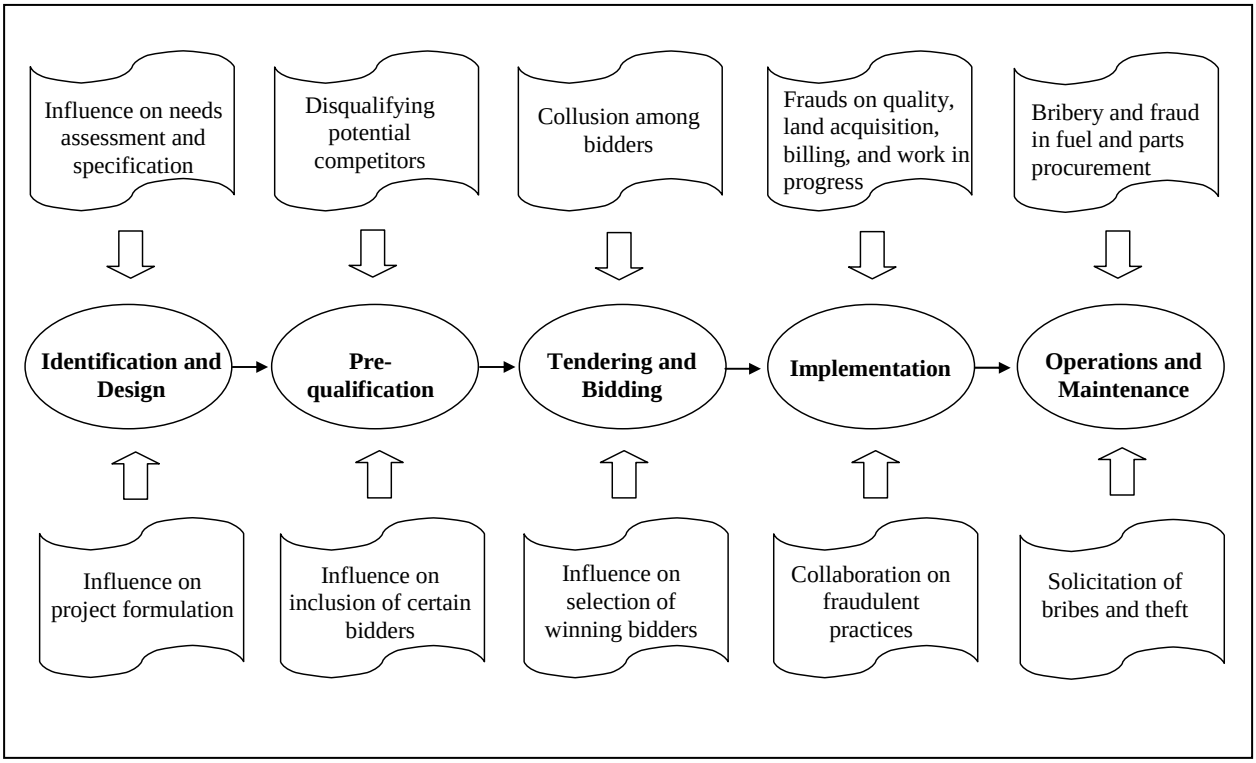
84. **Governance and Anticorruption Efforts in Indonesia**.[58] For the past decade, the Transparency International Corruption Perception Index ranked Indonesia as a country in which corruption is prevalent. Like other external development partners, ADB did not focus much on governance and anticorruption agenda before the financial crisis, despite the perception that corruption was a problem in the country. During the crisis, although the need to address corruption was recognized, the necessary modalities and resources were not available, as ADB's main focus was on poverty reduction.

85. During the transition period following the financial crisis, ADB provided assistance in many ways to try to help reduce corruption and improve governance. ADB stationed a governance specialist at the Indonesia Resident Mission (IRM), prepared a comprehensive Country Governance Assessment, and established a special procurement unit in IRM to detect allegations of fraud and corruption in its projects. Such instances were referred to the Integrity Division for investigation. OED's review of selected project documents at various stages of preparation shows that 26 of 30 documents reviewed discussed the need to guard against corruption, and instruments and mechanisms were suggested to mitigate the potential for

[58] Adapted from ADB. 2005. *Country Assistance Program Evaluation for Indonesia.* Manila.

corruption. While some outputs have been achieved from these efforts, ADB's contributions to governance and anticorruption have been fragmented. These activities need to be consolidated under a common results-oriented framework that places governance in the mainstream of ADB's operations in Indonesia.

Figure 2: Potential Sources of Corruption at Different Stages of the Project Cycle for Power Projects



Source: ADB. 2005. *Sector Assistance Program Evaluation of Asian Development Bank Assistance to Philippines Power Sector*. Manila.

86. Given the long-term nature of governance initiatives, it is premature to draw firm conclusions related to the sustainability of ADB's efforts in Indonesia. Based on the interim positive outcomes, the rating of ADB's governance and anticorruption activities was assessed as effective bordering on partly effective in the Indonesia CAPE.

87. **Agriculture and Natural Resources in the Lao PDR**.[59] The Lao PDR rates below all other countries in the Greater Mekong Region except Myanmar on measures covering the rule of law, regulatory quality, control of corruption, and government effectiveness. In 2003, for the first time, the government drafted a policy paper on governance issues and discussed it with aid agencies. This was an important milestone. There are governance concerns in the agriculture and natural resources sector: (i) corruption and its consequences, (ii) deficiencies and inconsistencies in the legislative framework and its implementation to manage common property natural resources, (iii) inadequately supervised and largely unaccountable state-owned

[59] Adopted from ADB. 2005. *Sector Assistance Program Evaluation in the Agriculture and Natural Resources in Lao PDR*. Manila.

enterprises, and (iv) certain policies are biased against the interests of the rural poor (including ethnic minorities).

88. New opportunities for corruption emerged as economic reforms started to take hold in the 1980s. The government has taken some actions to address corruption, for example, by adopting an anticorruption decree in 1999; issuing new directives at the party congress in 2002; and strengthening the State Audit Organization, State Inspection Authority, and Inspection Department of the Ministry of Finance. However, governance issues, including corruption, remain a problem. Factors contributing to corruption in the civil service include inconsistent understanding among government staff of policies, incomplete legal framework, unclear decentralization systems, and limited capacity in public administration. Despite past wage increases, government salaries are still generally below the minimum needed for food and basic necessities. The current low salary scale is an impediment to curbing abuse of public positions for private gain.

89. The relevance of governance to the ANR sector can be summarized as follows: (i) agricultural growth can benefit the rural poor, but this growth and benefit distribution depend on transparency and predictability in the implementation of investment laws, trade regime, and taxation; (ii) farmers, agribusiness enterprises, and investors must have confidence in relation to their land tenure to ensure security of property rights; and (iii) sustainable growth depends on protecting water, soil, and forest resources by controlling the commercial and population-driven loss of forest, and on the government's capacity to monitor and regulate, and to impose penalties for illegal acts. Major gaps remain between the formulation and implementation of legal instruments and between the establishment and enforcement of rules and regulations. The lack of transparency is evident in the case of logging, where breaches of the law have not been adequately dealt with or have gone unnoticed. Corruption was found to have infected an ADB-supported forestry project. Law enforcement is a continuing challenge to protect common property resources. This situation mostly affects the poor, whose livelihoods typically depend on common property resources. The government's ability to enforce regulations on illegal exports of nontimber forest products is weak. Increased commercialization of rare products is a threat to biodiversity.

90. ADB's 2005 review of its governance and anticorruption policies[60] subdivided corruption into five aspects: anticorruption; management of national wealth; management of financial institutions; transparent systems for public service, antibribery, and business integrity; and public ethics, trust accounts for public servants, etc. Another theme ("anti-money-laundering measures") is closely related to anticorruption. The review concluded that more needs to be done to strengthen ADB's anticorruption efforts. A World Bank risk analysis[61] suggested that stricter administrative measures can mitigate corruption risks. Such measures include (i) fiduciary controls on procurement and financial transactions and stronger internal financial review, (ii) integrating social accounting mechanisms into projects, (iii) effective results monitoring, (iv) explicitly screening new projects for corruption risks, (v) increasing general transparency by such measures as disclosure policies and a hotline, (vi) strategic communications and partnerships, and (vii) proactive sanctions enforcement. ADB could learn from this World Bank experience in strengthening its anticorruption efforts.

[60] ADB. *Review of the Implementation of ADB's Governance and Anti-corruption Policies: Findings and Recommendations*. 2005.

[61] World Bank, Vinay Bhargava, Director, International Affairs, Integrating Corruption and Governance Related Concerns in the Design of Country Strategies and Programs, Presentation, April 11, 2005.

E. Governance and the PBA Policy

91. The Paris Declaration,[62] endorsed by 91 countries and 26 organizations, including both ADB and the World Bank, is designed to improve aid effectiveness by promoting ownership, harmonization, alignment, results, and mutual accountability. Aid agencies committed themselves to harmonization, transparency, and collective effectiveness. Harmonization is particularly important in regard to cross-cutting issues, among which governance is prominent. The Managing for Results section of the Paris Declaration advocates the adoption of results-oriented reporting and assessment frameworks that monitor progress against a manageable number of indicators for which data are cost-effectively available. Aid agencies are to harmonize their monitoring and reporting requirements. Given the increased attention being paid to governance and anticorruption efforts by the MDBs and OECD, the monitoring systems include governance indicators.

92. ADB has harmonized its country performance assessment exercise with IDA and other MDBs. As per the 2004 PBA policy,[63] ADB's CPA uses the same questionnaire as is used in the World Bank's CPIA. In addition, the new PBA policy increased the weight of governance in country performance from 30% to 50% (the corresponding weight of governance in the World Bank's PBA of IDA resources is 66%). Governance performance is assessed every year as part of the CPA for most ADF recipient DMCs following the questionnaire. The assessments are based on the current status regarding various governance benchmarks and indicators at the macro level, without detailing governance variance at the sector and subsector levels. PBA procedures include country consultation and also consultation with the World Bank on the CPA, which makes the assessment exercise more transparent than before. Although ADB and the World Bank have harmonized the indicators in their allocation formula, separate analysis is undertaken. Thus, different conclusions may be reached using the same data. Because the CPIA ratings were not publicly available when this report was prepared, OED could not compare the consistency of the ADB and World Bank governance ratings for the same DMCs. Other aid agencies use different definitions of governance. For example, the Millennium Challenge Corporation uses indicators from the KKZ data base in its criteria to select eligible countries.[64]

93. The governance subcriteria in the PBA questionnaire include (i) property rights and rules-based governance; (ii) quality of budgetary and financial management; (iii) efficiency of revenue mobilization; (iv) quality of public administration; and (v) transparency, accountability, and corruption in the public sector. This is broadly consistent with the KKZ dimensions of governance and the corresponding indicators are significantly and positively correlated (see Table 5).

[62] *Paris Declaration on Aid Effectiveness*, March 2005. Paris.

[63] ADB, *Review of the Asian Development Bank's Policy on the Performance-based Allocation of Asian Development Fund Resources*, R249-04, 19 November 2004, Manila.

[64] Three groups of indicators are used: (i) ruling justly (4 of the 6 indicators are from KKZ), (ii) economic freedom (1 of the 6 indicators is from KKZ), and (iii) investing in people (the 4 indicators are non-KKZ variables).

Table 5: Correlation Matrix Between Governance Indicators

	2005 ADB PBA Governance Indicators					
KKZ Governance Indicators	Property Rights and Rule-Based Governance	Budgetary and Financial Management	Revenue Mobilization	Public Administration	Transparency, Accountability, and Corruption	Public Sector Management
Voice and Accountability	0.34	-0.09	-0.18	-0.02	0.42 [a]	0.16
Political Stability	0.72 [a]	-0.02	0.16	0.52 [a]	0.49 [a]	0.51 [a]
Government Effectiveness	0.66 [a]	0.52 [a]	0.59 [a]	0.73 [a]	0.56 [a]	0.75 [a]
Regulatory Quality	0.59 [a]	0.27	0.36	0.41 [a]	0.57 [a]	0.56 [a]
Rule of Law	0.82 [a]	0.24	0.34	0.55 [a]	0.70 [a]	0.68 [a]
Control of corruption	0.64 [a]	0.34	0.42 [a]	0.69 [a]	0.67 [a]	0.69 [a]
Average Governance Index	0.75 [a]	0.20	0.30	0.54 [a]	0.68 [a]	0.64 [a]

[a] significant at the 5% confidence level.

94. The PBA governance indicators are macro-level indicators. For many of the indicators, the governance scores are based on judgments and perceptions, rather than on empirical evidence. In most countries the IMF and the World Bank, rather than ADB, play the leading role in policy discussions in the areas covered by the macro-level governance indicators. By their nature, these governance indicators do not capture sector level and subnational level governance issues and sector level governance is not covered in the CPA. Sector level governance is important and ADB's Governance and Anti-Corruption Action Plan II emphasizes this level of governance. ADB has put considerable effort and financial resources into strengthening sector level governance. In sectors such as finance and banking, energy, transport and water supply/wastewater treatment, ADB has strengthened governance by addressing regulatory and institutional weaknesses, promoting public-private partnerships, strengthening corporate governance and commercialization and building capacity. ADB has also been active in improving aspects of governance at the sector level in the agriculture, health and education sectors.

95. Difficulties associated with the implementation of the governance portion of the current PBA formula relate to estimating the quantitative value of the indicators due to dearth of primary data and secondary data, which is often out of date if it exists. This leaves annual reviews and biennial assessments with limited choices for objective governance indicators, thus requiring the use of perception based governance scores. These governance indicators essentially measure outcomes rather than identifying ways to improve governance. The PBA governance indicators are not used to indicate how DMCs should improve governance or to develop road maps with monitorable, verifiable targets to improve governance.

96. Due to bi-directional causality of many development indicators, it is difficult to determine if their relationship with the level of development suggests "need" or reflects "performance". For example, should poor governance be treated as the lack of performance or as an indicator of a need to improve institutional capacity? The PBA formula sees low governance scores as a lack of "performance" and reduces the ADF allocation accordingly. If one looked at poor governance as a "need for improvement" one would allocate resources to countries with poor governance that are making determined efforts to improve the situation. In this sense, the present PBA formula penalizes the countries with weak governance by treating governance as a performance indicator rather than an area requiring capacity building support. Benchmarking a country's governance performance and then rewarding those countries making progress in improving governance would be more consistent with managing for development results than making ADF allocation decisions on the governance score in any one year. Such an approach would need to recognize that by their nature governance indicators change slowly over a long period. This

suggests that ADB and other donors should focus their governance improvement efforts and stay engaged in selected areas over a long period.

97. Problems of defining and measuring governance and the unintended mis-use of governance indicators does not apply just to ADB. A recent OECD report concluded that even the most carefully constructed composite perception-based governance indicators (e.g., KKZ; CPIA) lack transparency and comparability over time, suffer from selection bias, and do not identify how to improve governance. The OECD report summed up as follows: "…, it is clear that international investors, official donors, and develop analysts and academics all show a strong propensity to use composite governance indicators to discriminate among countries and identify trends over time in ways the indictors are not designed to permit. Investors do so mainly in country-risk analysis, donors for aid-allocation purposes, and academics for regression analysis. The danger, indeed, the likelihood, is that major business and policy decisions are made on false premises."[65]

98. Subsequent to the ADF IX replenishment, ADB harmonized its PBA procedures with those of the World Bank. There was, however, no rigorous study undertaken by ADB that demonstrated that good governance is the key binding constraint for development in all DMCs and that it merits such a high weight in the PBA formula. Such a rigorous study should be undertaken on the governance portion of the PBA formula. The study should clearly establish the linkage for the variables used and the achievement of development results, the composition, measurement and weighting of the governance variables and whether sector level governance variables should be included in the formula. Given the importance of harmonization, the study should be undertaken in partnership with the World Bank. Unless the study can satisfactorily address the issues discussed above, consideration should be given to lowering the weight for governance in the PBA formula. Based on the forgoing analysis, arguments for reducing the relative weight of governance, which would require a revision of the PBA policy, include: (i) the difficulties in defining and measuring governance, (ii) the apparently weak relationships between all dimensions of governance and the levels of development that prevail in the Asia Pacific and Region, and (iii) the somewhat inconclusive empirical relationship between good governance and achieving other development results. OED is aware that lowering the weight might be perceived as sending the wrong message, given that ADB has recently adopted the MTS II, which places priority on good governance and controlling corruption, and the Governance and Anti-Corruption Action Plan. However, this must be balanced against the potential harm that may be caused to DMCs whose ADF allocation is reduced because of a score on an imperfect variable that is difficult to define, measure and compare over time and across countries.

99. The foregoing does not imply that OED feels that good governance and efforts to control corruption are not important.[66] Clearly, they are important in every country. Good governance, sound policies and institutions, transparency, predictability, accountability and participation contribute to achieving development results. Corruption undermines efficiency and effectiveness in achieving development results (e.g., funds leak outside the DMCs; goods and services cost more than they should; shoddy construction and maintenance; tax evasion results in less government revenue and lower expenditures on things like health, education, operations and maintenance). The issues identified by OED relate to a lack of clarity of definition, difficulties of measurement and a lack of rigorous analysis linking good governance to achieving

[65] Arndt, Christiane and Charles Oman. 2006. *Uses and Abuses of Governance Indicators*. Paris: Development Center of the Organization for Economic Co-operation and Development. page 46.

[66] OED's forward work program includes an evaluation of ADB's governance and anticorruption policies. That evaluation will provide an opportunity to further assess some of the issues raised in this report.

development results in ADB's DMCs. Given that good governance and control of corruption have only been on the development agenda since 1996, it is not surprising that difficulties have been encountered in the areas of definition and measurement. The foregoing raises the question about whether governance is always the most important binding constraint for development. These issues are important because in the PBA formula ADB purports to be able to accurately define and measure governance on a numeric scale and uses the results to reward and punish DMCs by allocating more or less ADF funds, depending in large measure on the governance score.

IV. UNDERSTANDING PROJECT SUCCESS

A. Introduction

100. Successful projects are the building blocks of sector- and country-level outcomes of ADB's assistance to its DMCs. Project success, as discussed in previous chapters, depends on many factors, both in the DMCs and internal to ADB. In addition, there are exogenous factors beyond the control of ADB or the DMCs that impact on project success. Econometric techniques, descriptive statistics, and qualitative assessments can help to better understand how various factors impact on project success and to explore causal relationships among and between the variables.

101. To supplement the analysis of the factors that may influence project success, presented in Chapters II and III, this chapter seeks to help further understand the key factors that may influence project success with the help of a multivariate logit analysis.

B. Multivariate Logit Analysis

102. The analysis incorporated key explanatory factors, e.g., sector, country characteristics, ADB inputs, and the quality of project implementation (e.g., delays in implementation, and cost overruns/underruns) to examine their causal relationship with project success. It also simulated several possible and potentially influential combinations.[67] By controlling for the influence of a large number of variables, the analysis identified those that appear to be the most important predictors of project success.

103. The variables were selected on the basis of their potential to influence project success and data availability. The variables included in the analysis can be grouped into the following categories: (i) sector: the sector in which the project takes place; (ii) country: including economic climate and governance scores; (iii) ADB inputs: mission leader characteristics, inputs during project processing and project administration; and (iv) project implementation-related factors such as delays in implementation, and cost variations. The logit analysis was estimated by time slices also to ensure maximum data consistency and variable relevance. The full list of variables tested is presented in Table A11.1 in Appendix 11.

104. Increasing the number of variables in the model helped to reduce concerns about the bias of omitted variables. However, this concern cannot be completely eliminated, since some variables that influence project success remain outside of the model due to data constraints and/or difficulties in measuring them. Despite the number of variables considered in the analysis,

[67] In the model, project performance is labeled Y and explanatory variables are labeled as the vector X1: $Y_{est} = a + b1*X1 + e$, where e is the error of estimate. Y is defined by whether the PPER or PCR rates the project as successful or not. This variable has only two possible values: 1 if the project is rated successful, and 0 if it is rated as partly successful or unsuccessful. Significance was tested at the 1%, 5%, and 10% levels.

many other factors influence project success. A partial list would include (i) DMC inputs including their ownership, sectoral policies and programs, institutional capacities at both the national and project levels, and the demand for project outputs; and (ii) exogenous factors such as fluctuations in international commodity prices, natural disasters, or public health outbreaks, which can also affect the success of projects. There are many other factors that could also impact on project success, or lack thereof. A question that needs to be asked is whether the variables included in the analysis are the only ones influencing Y. If not, and these other "omitted" variables are correlated with X1, then the estimates of the impact of X1 suffer from an "omitted variable bias." The explanatory influence of the independent variables used in the model was significant. Statistical tests were performed to provide an indication of how much of the variation in project success across projects is explained by the model.[68] This provides some indication of the variation that is accounted for by other factors that are not included in the model.

105. The logit analysis used "project success" as the dependent variable. The independent variables that were tested in the model included the key variables discussed in Chapters II and III. Because the governance indicators were available only from 1996 onward, the model was run twice—once for all projects that had been rated and once for the projects approved in the 1990s. The robustness of the results was also tested by running the model for selected DMCs separately and for different periods (time slices).

106. Table 6 presents the summary of the analysis; further details are in Appendix 11. The implications and conclusions resulting from the analysis are summarized below.

C. Sector Characteristics

107. The influence of sector in the model was significant. The sector in which the project is implemented is a powerful explanatory factor in determining project success. In some sectors, projects are relatively more difficult to implement and to achieve intended outputs than in others. Infrastructure projects are robust and tend to perform well under most conditions. Overall, sectors were ranked in the following order in terms of project success: transport/communications, energy, multisector, social infrastructure, industry, agriculture. This finding was very robust and was consistent across the models tested after controlling for the influence of many other variables. At the country level (e.g., People's Republic of China [PRC], Sri Lanka) the agriculture sector showed negative correlation with project success.

108. The strength of the relationship between sector and project success highlights the importance of sound sector policy work. Project success should increase if ADB has a good understanding of sectoral policies, sector institutions, and sector level governance. OED findings suggest that ADB is most effective in addressing such issues if it is engaged in the sector over a long period. This finding implies that one of the keys for ADB to be a learning organization is to share information and experience among sector specialists, particularly in the sectors in which ADB projects are less successful. ADB's knowledge management practices are weak in this regard, particularly since the 2002 reorganization. With some exceptions, the sectoral communities of practice were not effective in sharing knowledge across sector divisions. The Regional and Sustainable Development Department (RSDD) was expected to contribute to this role, but its subsequent restructuring resulted in a narrowing of its focus to the water,

[68] The predictive power of the model can be measured by the receiver operating characteristics (ROC). A model with no predictive power has an area equal to 0.5. A perfect model has an area equal to 1. For the various models tested, the ROC ranged from 0.76 to 0.80.

energy, and transport sectors, which are among ADB's best performing sectors. The focal points for the other, generally weaker performing sectors were redeployed to the regional departments.

Table 6: Logit Regression Results for Approved Evaluated Projects from 1970 to 1997

	Logit Coefficients			
Significant Variables	1970s	1980s	1990s	Total
Implementation Delays		-0.47 ***	-0.26 ***	-0.26 ***
Cost Variation		0.02 ***	0.02 **	0.004 **
Number of Project Administration Persondays	-0.01 ***	0.01 ***		
Project Administration Person Days per Year of Implementation		-0.10 ***	-0.04 ***	-0.03 ***
Average GDP Growth Rate during the Project Implementation and the First 5 Years of Operations .	0.30 ***	0.25 ***		0.17 ***
Sector dummies:				
Agriculture				0.66 **
Energy	1.36 ***	2.30 ***	1.92 ***	2.18 ***
Industry				1.15 **
Multisector			1.46 **	1.92 ***
Social Infrastructure			1.11 **	1.18 ***
Transport and Communications	2.22 ***	1.58 ***	2.04 ***	2.40 ***
Governance Components				
Voice and Accountability			-0.65 **	
Regulatory Quality			0.78 **	
Constant	-1.06	0.08	1.35	-0.53
No. of Observations	216	295	304	827
LR chi^2	65.63	68.78	72.34	178.37
Prob > chi^2	0.00	0.00	0.00	0.00
Pseudo R^2	0.22	0.17	0.20	0.16
Area under ROC Curve	0.80	0.77	0.79	0.76

Significance Levels:1%=***; 5%=**

Source: Appendix 11.

109. ADB has an institutional problem that limits knowledge sharing across sector divisions. This may adversely affect learning from experience to improve the achievement of development results. The dominance of sector variables in explaining project success also raises some questions about ADB's 2002 reorganization. It is not clear that scattering sectoral experts among the regional departments will contribute to project success. Prior to the reorganization, ADB's sectoral specialists were concentrated in two divisions, one serving each region. That organizational structure may have allowed more knowledge sharing and mentoring among sector experts.

D. Country Characteristics

110. ADB's lending and nonlending services are provided to a wide range of DMCs, which have reached different stages of development, with varied poverty incidence. Many DMCs are ADF borrowers, and some are OCR borrowers. The DMCs range in size from giants like PRC and India to small Pacific Island nations. Some are economies in transition and some have well

developed market economies. Country characteristics are important explanatory variables for project success, and the relationships are relatively robust. Project success is dependent on how well projects are implemented and operated. The "country" variable implicitly includes the quality of executing and implementing agencies, and ADB's country classifications (ADF, OCR, or blend countries). Logit regression runs were performed at the country level as well for selected countries (e.g., Bangladesh, PRC, Indonesia, Nepal, Pakistan, Philippines, and Sri Lanka) for the period 1970-1997. A governance variable was not included in the run due to KKZ data limitations and the fact that governance was not a priority issue at ADB in the 1970s and 1980s.

111. One would expect the success of development projects to be influenced by general economic conditions during both project implementation and operation. For example, lines of credit are impacted by the business climate both during and after implementation. During economic downturns or periods of exchange rate instability, the demand for loans by businesses declines. Weak economies can also affect the demand for project outputs (e.g., traffic is slower to build up; there is less demand for water and power). If the economy is weak, governments find it difficult to mobilize the funds to finance part of the investment or to pay for operation and maintenance costs or for education and health costs.

112. The average GDP growth rate during the project implementation period and 5 years thereafter was used as a proxy for the economic climate. There was a strong relationship with a positive sign, signifying that the better the economic performance was the more likely were projects to be successful. This was evident at the country level[69] as well as for the all-country runs. This finding confirms some of the findings cited earlier about the influence of the macroeconomic environment on the success of World Bank projects. When an economy is growing at a reasonable pace, a government is less likely to experience fiscal problems, and the supply response is strong and demand is buoyant. This leads to better project implementation and operations.

113. This finding underscores the importance of sound country economic analysis to underpin project formulation, something that has been stressed in the retrospective reviews of economic analysis prepared by ERD. These findings reemphasize the importance of a point made in the 2005 AER. Independent long-term economic forecasts are not produced by ADB and are not available in the market for many countries. It is left to individual mission leaders and project preparatory TA-financed consultants to develop such forecasts or make assumptions on a project-by-project basis when they are needed to underpin demand forecasts. A major evaluation of the performance of ADB operations in the Philippine power sector completed in 2005 concluded that, because economic growth was consistently overestimated, there was investment in overcapacity, and power sector infrastructure was underutilized. Demand for power did not grow as rapidly as anticipated, and costly overinvestment took place.

114. The economic climate is important for project success, although infrastructure projects are quite robust and can perform well despite difficult economic circumstances. The economy is discussed in the CSP, but much of the analysis is backward rather than forward looking. The documents submitted to the Board for the approval of project loans rarely mention macroeconomic issues.[70] Given their relationship to project success, consideration should be given to macroeconomic factors in the risk section. If there are significant economic risks, ADB should finance projects that are less vulnerable to a weak economic context.

[69] Except for Nepal, it was robust for other countries such as Bangladesh and Philippines for 1970-1997.
[70] Because of their nature, documents related to program loans are more likely to discuss macroeconomic issues.

115. Although sector factors are an important determinant of project success, sectors vary from country to country. Good country knowledge helps in designing successful project interventions. Including sectoral road maps in CSPs, focusing ADB's assistance on a limited number of sectors, staying engaged for a long period of time, developing joint approaches with other aid agencies, and focusing on sectoral level governance issues should help in designing interventions that are more likely to be successful.

116. After the influence of other variables was accounted for, the analysis found some relationship between macro level governance variables at the country level and project success for projects approved in the 1990s. Regulatory quality was significantly related to project success, with a positive sign. The better the regulatory quality is, the higher the chances of project success. The positive relationship between regulatory quality and project success is in the direction expected. It is reasonable to surmise that, other things being equal, projects implemented by more effective governments are more likely to succeed than projects implemented by weaker governments. This is an important finding, since much of ADB's policy dialogue at the sector level relates to improving the regulatory quality (e.g., in the financial sector, regulation of utilities). However, regulatory quality does not feature in ADB's PBA formula. Voice and accountability was also significantly related to project success, but with a negative sign.[71] OED's concerns about the analytical strength of the negative relationship of voice and accountability are discussed in Chapter III. The other macro level governance variables (e.g., political stability, government effectiveness, rule of law, control of corruption) were not related to project success. In other runs, when the sector variables were eliminated from the model, or in the country level runs, the governance variables were not related to project outcomes after other factors were accounted for. This means that the impact of macro level governance indicators on project outcomes was not so strong that it overrode the influence of factors like sector, other country-related variables, and other factors considered in the model.

E. ADB Inputs

117. The main findings and their implications related to other variables include the following:

(i) **The influence of the characteristics of mission leaders on project success was not conclusive.** OED findings suggest that the quality of projects at approval is critical to their success. This is because good quality projects are well designed, cost effective, and socially optimal, and their implementation arrangements are clearly planned. ADB's project processing teams play an important role in ensuring project quality at entry, and mission leaders are at the center of this process. However, after accounting for the influence of other factors internal to ADB and DMCs, the logit analysis showed an inconclusive relationship between the characteristics of mission leaders and project success. This was partly due to (i) some missing information on mission leaders; and (ii) exclusion of other factors such as DMC inputs (other than economic climate).

(ii) **Long delays are associated with projects that perform poorly**. The longer the delay, measured in comparison with the implementation schedule prepared during project formulation, the more likely it is that project outcomes will be less

[71] To address multicolinearity problems with all measures of governance other than voice and accountability, an index was developed that combines the other five governance indicators. However, the index was not significantly related to project success.

than successful. OED's review of the ongoing portfolio and evaluation findings found that implementation delays are endemic in ADB-financed projects and that ADB has not learned from past experience to estimate more accurate implementation schedules. However, this analysis suggests that delays are not just a matter of ADB's inability to estimate realistic implementation schedules and of premature Board considerations. Rather, long delays appear to be a leading indicator of project difficulties. Some delays are evident early in the project cycle (e.g., delays in loan effectiveness beyond the standard 90 days specified in loan agreements, delays in first contract award, delays in disbursement, delays in consultant recruitment). This finding reinforces the need for a more systematic use of project readiness filters before projects are presented to the Board.

(iii) **ADB devotes more loan administration resources to less than successful projects**. There was a negative relationship between project success and the amount of time ADB staff spent on project administration missions. More project administration days were required for less successful projects. ADB is able to identify problem projects and devote somewhat more project administration resources to try to resolve problems and achieve better development results. Often, however, these efforts do not succeed in making the project successful. In some cases the problems may be so intractable that they cannot be resolved. However, OED's reports on the loan and TA portfolio have identified many weaknesses in ADB's loan administration activities. Some ongoing loans are not reviewed, there are limited technical skills among some staff assigned to project administration, there is frequent turnover in ADB staff assigned to administer a project, and proactive measures are not always taken to solve problems. In response to OED's 2005 *Loan and TA Portfolio Report*, Management adopted an action plan to improve project administration.

(iv) **Cost variation has weak influence on ultimate project success**. There was some evidence pointing to the influence of project cost overruns on project success, but the relationship diminished after sector variables were removed from the model.

F. Dominance of Sector Variables

118. To avoid the influence of the dominating sector variables, additional runs were carried out in which sector dummies were excluded from the model. The purpose was to see whether the relative explanatory strengths of other factors that were consistently positively correlated with project success would improve. Implementation delays, cost variations, the time taken for loan effectiveness, quality of project administration, and general economic climate contribute to, or detract from, project success. At the country level, as well as globally, these variables showed significant correlation with ultimate project success. However, when sector variables were included back in the model, the relative strengths of their relationships diminished.

G. Key Lessons and Implications

119. Given that sector characteristics are strongly related to project success, projects should be identified and designed based on a detailed sector assessment and a results-oriented sector roadmap. Governance-related issues, particularly regulatory issues, should also be addressed at the sector level to ensure that poor governance does not undermine a project's success.

120. Adequate attention should be paid to country level characteristics, both at the time of project preparation and during implementation. National priorities, country ownership, and institutional capabilities should be taken into account in preparing project level assistance.

121. ADB should pay more attention to macroeconomic factors in the risk sections of project documentation. The average GDP growth rate over the 3 years before loan approval and a 2 year forecast are available for all DMCs in the Asian Development Outlook.[72] While infrastructure (transport and energy) projects are robust and perform well almost regardless of the overall economic climate, projects in other sectors are less robust and are subject to more risks, including those related to overall economic performance.

122. Delays in implementation may be an early warning signal that there is a risk that the expected development outcomes will not be achieved. ADB should make greater efforts to estimate realistic project implementation schedules, make greater use of project readiness filters to avoid startup delays, and make major project administration efforts to identify and solve problems for projects that are experiencing major delays.

123. While full attention to ensuring the quality of projects at entry is important, measures should also be taken by ADB and the DMCs to ensure full implementation and operation of projects, so that intended development impacts flow from them. With more effective incentive systems that focus on the achievement of projects' development results and strengthening accountability chains, ADB inputs to project processing and implementation could be further strengthened to ensure a higher probability of project success.

124. The analysis presented in this chapter was an exploratory attempt at examining key determinants of project success using quantitative techniques. Chapter II reported the results of a qualitative analysis that identified the characteristics of successful projects. Appendixes 4 through 8 summarized the characteristics of successful projects in five key sectors identified in the MTS II as sectors in which ADB wishes to be a leading provider of financing and knowledge. OED's future work program should include additional evaluations to identify factors that influence project success and ultimately country outcomes. The qualitative and quantitative analysis in this report found that many factors influence project success. Future evaluations should distinguish between two broad types of factors: (i) those within ADB's control (e.g., continuity of ADB involvement; quality at entry; project design; learning lessons from past experience; amount and quality of ADB supervision during project implementation; use of participatory approaches; role of ADB staff and consultants); and (ii) those that are not (e. g., country ownership; country characteristics; macroeconomic climate; sector level governance; capacity of the executing agency). (Responsible lead department: OED).

V. CHANGING INCENTIVES TO FOCUS ON DEVELOPMENT RESULTS

A. Introduction

125. ADB's formal and informal internal incentives and performance management systems reward project approval rather than project quality, project implementation, and the achievement of development results. This is often informally referred to as the approval culture. Changing incentives to focus on achieving development results rather than loan approvals has proven to be a difficult task for ADB over many years. The performance of all staff is assessed based on the delivery of annual work programs that, on the operational side of ADB, are dominated by (i)

[72] ADB. 2006. *Asian Development Outlook 2006.* Manila.

project and TA processing, and (ii) project and TA administration. Clear, monitorable indicators are available to measure whether or not a loan or a TA was approved as scheduled. ADB's systems track such information, which is regularly reported to Management and senior staff. Accountability for processing loans and TAs is clear and rests with individual staff.

126. ADB's efforts to strengthen the staff performance management system have not addressed the issue of linking the achievement of development results with individual staff assessments. ADB's personnel management system does not hold individuals accountable for unsuccessful projects or TAs, or reward staff associated with successful projects or TAs. ADB does not have a good system for tracking the achievement of development results. There are no incentives for staff to remain involved in a project or a TA after it is approved. It is common for a mission leader to process a project or a TA and then turn it over to another group for implementation supervision. OED reports have noted that frequent turnover of assigned ADB staff during project implementation sometimes detracts from project success.

127. The MTS II makes it clear that addressing the approval culture is an important corporate objective for ADB:

Enhancing ADB's contribution to country outcomes requires a shift in corporate priorities from an institutional culture that prioritizes loan approval and lending volumes, to a culture where portfolio performance and contribution to country outcomes become predominant. This shift must be supported by changes in the incentives systems, including staff rewards. It also entails the refinement and application of quality-at-entry mechanisms and project readiness criteria for all operations, both of which play critical roles in subsequent project implementation and ultimately overall portfolio performance. Linked to this is also a required change in the overall institutional performance assessment parameters, away from "Board approvals" to "financial commitments" (i.e., loan/grant documents signing and effectiveness), and portfolio performance (project implementation).[73]

128. ADB is a service organization, and its success depends, in part, on the quality, skills mix, and motivation of staff. The report of the Independent Assessment Panel on the Effectiveness of the Bank's Reorganization in January 2002[74] concluded that ADB had lost technical expertise and recommended that ADB should increase the number of technical specialists by 50. During consultations with some of ADB's largest clients (e.g., PRC, India, Indonesia, Pakistan, and Philippines) for the *Middle Income Country Strategy*, comments were made that some ADB mission leaders lacked technical skills and experience. These comments must be taken seriously. In this context the term technical does not mean only engineering skills or technical skills in a particular field. Rather the concept is broader and means people who are competent in the fields about which they are talking. Some DMCs have moved past a requirement for ADB to provide simple operational technical advice, as they have developed that capacity. However, sometimes ADB missions have lacked the skill and experience to provide the value added that is sought by clients.

129. There is an untested perception both within and outside ADB that current mission leaders are younger and less experienced, and have fewer technical skills than in past years. There is also a clear recognition in ADB that the incentives that guide and motivate ADB staff need to be changed to focus on the delivery of development results. This chapter is designed to shed some light on these issues by addressing the following questions: (i) Has there been a

[73] Page 20 of the MTS II.
[74] See para. 61 in that report.

change in the characteristics of mission leaders? and (ii) Could ADB human resource policies provide stronger incentives for staff to achieve development results?

130. This is the first attempt in ADB to explore the possibility of strengthening ADB's accountability chain by linking the achievement of project success/development results with individuals. Introducing fundamental changes in any organization is a major managerial challenge. Developing and implementing such a system would require careful study over a year or more, extensive consultation with staff and Management, and considerable resources to manage the change.

B. Human Resource Context

131. The 1996 Human Resources Strategy[75] recommended significant changes to align ADB's recruitment and other human resource strategies to help transform ADB from a project-financing bank to a broad-based development institution. There was a concern that the large increase in private capital flows to Asia in the first half of the 1990s would marginalize ADB as a traditional development lender.

132. One objective of the 1996 Human Resources Strategy was to strengthen staff competencies. Within this context, in 1997 the Budget, Personnel and Management Systems Department (BPMSD) and the Strategy and Policy Department (SPD) assessed the type of staff that ADB would need in the short and medium term and concluded that ADB's staff skills mix needed to be changed.[76] The results of this analysis provided a framework for staff recruitment and for the evaluation of current staff for advancement. Future ADB staff were expected to have a broad, multidisciplinary background, likely specialized in economics or finance, and with experience in financing either public or private sector projects. These staff would be supported by specialists in environment, social development, and governance.

133. Skills not required in the longer term were also identified, including engineers (e.g., telecommunications and transport engineers),[77] financial analysts, agriculture specialists (e.g., in livestock, fisheries, and agronomy), and traditional program officers that did not have formal training in economics.[78] These specializations were to be phased out. Rather than having such expertise in-house, short-term staff consultants were to be employed as required. Thus, some of ADB's technical skills were to be outsourced. Seven years later, concerns had been raised about a lack of technical skills and sectoral competence among ADB staff and excessive reliance on consultants.

134. ADB's 2004 Human Resources Strategy[79] identifies three key components for successfully implementing the managing for development results (MfDR) agenda: (i) accountability for results at all staff levels, (ii) a merit-based human resource management system, and (iii) staff awareness and ownership of the MfDR agenda. Successful implementation of MfDR requires a reorientation in the way ADB manages its human resources. Among other things, the performance management and incentive system should be clear and

[75] ADB. 1996. *Human Resources Strategy Paper*. Manila.
[76] ADB. Memo to the President from Director, BPMSD. 16 July 1997.
[77] The intent in regards to engineers was that ADB would not recruit pure engineers; rather it would recruit people with a combination of skills (e.g., finance and engineering, or urban studies and engineering).
[78] The general consensus in ADB is that the change in focus of replacing programs officers with trained economists has been effective.
[79] ADB. 2004. *Human Resources Strategy*. Manila.

transparent, reward good performance, instill accountability, and provide a framework for dealing with skills deficiencies and poor performance.

135. The 2004 Human Resources Strategy also addresses issues related to the skills mix, including (i) determining the skills required to meet ADB's business needs; (ii) assessing the current skills available within ADB; (iii) dealing with redundant skills issues; and (iv) providing a framework for acquiring, developing, and retaining the required skills.

136. Findings related to ADB's skills mix and the issue of linking staff accountability with the achievement of development results would be relevant in the context of both the MTS II and the 2004 Human Resources Strategy.

C. Changing Characteristics of Mission Leaders

137. Mission leadership is much more than simply applying the technical skills of the person concerned. In addition to having technical skills, mission leaders must have negotiating skills, the ability to manage a team, cross-cultural sensitivity, knowledge of the country and sector, and a full understanding of ADB's policies and procedures. Mission leaders are responsible for managing the formulation, design, and processing of projects. Their vision must be broad enough to identify and develop mitigation measures for potential risks faced by a project, view projects in a multidisciplinary context, undertake high level policy dialogue, and assess the strengths and weaknesses of the EA. Mission leaders must be able to assemble and manage a multidisciplinary team[80] and interact with senior government officials, ADB Management, project beneficiaries, and other aid agencies. Because the range of ADB's financial products is expanding under the Innovation and Efficiency Initiative, project processing teams must be fully conversant with the full range of ADB's financial products and loan terms to structure suitable financial products that are appropriate for the situation and meet the needs of the clients.

138. OED compiled information on the descriptive characteristics of mission leaders for all projects approved in 1985, 1995, and 2005. The data were analyzed to determine whether there were changes in the profile of mission leaders over this 20 year period.[81] The main results of the analysis are summarized below, and supporting statistical tables are included in Appendix 12.

1. Experience of Mission Leaders

139. Proxies used for the experience of a mission leader were (i) age, (ii) years of relevant pre-ADB experience, and (iii) years of experience in ADB.[82] The average age of mission leaders increased from 44.4[83] in 1985 to 47.9 in 1995 and then declined to 44.9 in 2005 (see Table A12.1). In 2005, mission leaders had about 3.5 fewer years of pre-ADB experience and nearly 1 year less of ADB experience than their counterparts in 1995. Combining experience both in ADB and prior to joining ADB, 2005 mission leaders had 4.3 years less on-the-job experience than their 1995 counterparts. There were more mission leaders under 40 years of age in 2005

[80] Depending on the project, this may involve sectoral experts, engineers, economists, financial analysts, environmental specialists, social safeguard specialists, and lawyers.

[81] Information available in ADB's personnel records (the K20 data base) was used in a way that protected confidentiality and preserved the anonymity of individual ADB staff.

[82] These are imperfect proxies for experience. For example, in some countries a PhD requires 7 years of study and in others 3 years. In such cases, particularly for people at the beginning of their careers, age does not relate directly to experience. Also, these proxies do not capture varieties of experience.

[83] In the late 1970s, many staff from donor countries left ADB because of low salaries. ADB subsequently increased salaries by 19.1% in 1980 and 14.7% in 1981 to be more competitive in the labor market. Many of the staff recruited in the early 1980s were relatively young.

than a decade previously (see Table A12.2): In 2005, 22% of the mission leaders were under 40 years of age; in 1995, only 8.5% were in their 30s. In 1995, 71% of mission leaders were 45 years of age or older; the corresponding figure in 2005 was much lower at 52%. Overall, the data support the proposition that mission leaders in 2005 were somewhat younger and less experienced than was the case a decade previously. This confirms the feedback received from some of ADB's key clients.

140. The amount of mentoring available to new staff, particularly new mission leaders, declined in the past decade because of four factors: (i) many experienced staff availed of the Special Separation Program in the mid-1990s and left ADB; (ii) the 2002 reorganization divided larger sectoral divisions into smaller divisions within the regional departments; (iii) experienced mission leaders were transferred from operations divisions to RSDD and resident missions; and (iv) there were weaknesses in knowledge sharing across sectoral divisions. ADB recognized that special training was needed to support new mission leaders. A mentoring program and a Mission Leadership Program were developed. However, the 2004 Human Resources Strategy concluded that training of mission leaders was less than successful. In 2004, the Project Team Leadership Program was designed for mission leaders and members. The program, which targets operations staff with less than 5 years of experience in project processing, has three components: (i) the training program—a series of modules covering the main training needs; (ii) an online Operations Toolkit, for reference and field use as a CD-ROM; and (iii) a mentoring program—a hands-on program that allows less experienced staff to learn from the experience and knowledge of more experienced staff. Recent policy changes make it more difficult to recruit experienced staff after they leave ADB to act as mission mentors.

2. Professional Specialization of Mission Leaders

141. The 2004 Human Resources Strategy concluded that technical expertise was undervalued in ADB. There was a modest increase in the percentage of missions led by economists since 1995 (24% in 1985, 25% in 1995, and 31% in 2005) (see Table A12.3). There was a corresponding decline in the proportion of missions led by technical specialists, engineers, and financial analysts. Much of the decline in mission leadership by engineers occurred between 1995 (29%) and 2005 (22%). The proportion of missions led by financial analysts fell sharply between 1995 (15%) and 2005 (5%). These findings largely confirm the conclusion of the panel that assessed ADB's reorganization and feedback from some DMCs. However, there is a caveat. In 2002, ADB changed the way that it classified staff. This made it difficult to identify the professional specialization of mission leaders in 2005, as ADB no longer has a skills inventory for its staff. Therefore, in doing this analysis, OED examined educational qualifications and previous classifications of staff to make the 2005 data as comparable as possible to the data for 1985 and 1995.

142. In 2004 and 2005, RSDD prepared financial due diligence retrospectives. The draft 2005 report[84] evaluated projects using seven attributes to assess the quality of the financial analysis. While there were improvements in 2005, the performance was not even, and the majority of projects were still rated only as adequate; 12% failed to meet the minimum requirements. Notwithstanding the modest improvements in 2005, there is considerable scope for further improvement in the quality of financial analysis used to support the approval of loans by ADB. The retrospective reviews identified many factors that contributed to these disappointing results. One of the most important relates to staffing. The 2004 Retrospective reported that eight sector divisions were without a financial specialist. The 2005 Retrospective recommended that the

[84] ADB. *Financial Due Diligence Retrospective*. 2004 and 2005. Manila.

financial management specialist positions should be used better and that each sector division should be staffed with at least one financial specialist with primary responsibility for financial due diligence. It remains to be seen whether ADB will respond to that recommendation.

143. In some DMCs the capacities of EAs have strengthened over the years. At the same time, ADB skills have stagnated or eroded in some areas. The sector knowledge of the mission leader, hands-on experience in designing and managing projects, and past working experience in the sector are relevant in ensuring quality at entry. Some of the inexperienced ADB staff have been unable to meet the expectations of ADB's clients.

144. While the foregoing analysis identifies some issues that should be considered when analyzing ADB's staff skills mix, this is a complex issue that covers many factors beyond those considered in this report. The staff skills mix required to address client needs is a multifaceted challenge, should be forward looking, and should consider the changing product mix that ADB will offer its DMCs. BPMSD is in the process of developing a complete high levels skills inventory of ADB staff, which is to be completed in 2006. The results are expected to provide the basis for action to bring ADB's staff profile in line with operational requirements. ADB's Second Governance and Anti-Corruption Action Plan indicates a need to strengthen ADB's portfolio management skills, particularly related to procurement. Normally, engineers are best equipped to handle procurement issues. OED's 2005 *Report on Loan and TA Portfolio Performance* also highlighted a need to strengthen ADB's staff skills for portfolio management. Within the framework of ADB's 2006 zero real increase budget, space was created to reprioritize and realign staff resources based on business needs by (i) sequestering 30 vacant positions across ADB and redeploying these positions in units requiring staffing/technical expertise, and (ii) implementing an Enhanced Separation Program to create opportunities to make some changes in ADB's skills mix.

3. Gender of Mission Leaders

145. During its first 30 years of operations, ADB's international staff were overwhelmingly male. In the 1990s, ADB recognized the benefits of greater gender diversity and mainstreaming gender equality into recruitment and staffing matters.[85] Gender Action Programs I and II supported the implementation of this policy. Among other things, steps were taken covering adopting targeted gender recruitment, enhancing career development and promotional prospects for women, increasing the number of women in operational areas, and creating a better work environment for women. The target was for women to occupy 30%-35% of international positions. In 1995, women accounted for 12% of ADB's professional staff, a figure that rose to 29% by 2005. The proportion of women international staff in operations departments increased from 9% in 1995 to 28% in 2005. The impact of ADB's efforts to increase the number of women staff is reflected in gender statistics related to project processing missions. In 1985, there was only one female mission leader. There were two in 1995. Women led 16 (28%) of the 58 missions for loans approved in 2005. The increase in the number of female mission members began earlier. In 1985, only two missions included women. In 1995 women accounted for 22 (14%) of the 155 members on project processing missions. By 2005, the figure had risen to 61 (32%) of the 190 mission members. Progress for women beyond the mission leader level has been slower, and women remain significantly underrepresented at senior levels.

[85] ADB. *The Bank's Policy on Gender and Development*. R74-89, Revision 1, Final. 11 June 1998. Manila.

D. Providing Incentives to Focus on Achieving Development Results

146. Accountability is critical, but achieving it in ADB has proven difficult. Until the 1990s, a typical career path in ADB was within sectoral divisions. Vacancies were not advertised internally. In the 1990s, staff movement increased, and positions were advertised within ADB. While there are benefits to this more open, competitive system, one result has been many staff changes (mission leaders, project administration staff, directors, directors general) throughout the project cycle—from initial TA through loan processing to implementation and project completion. The impression is that in the 1980s there was more stability in the involvement of ADB staff responsible for a project. There is now more fluidity in the system. However, ADB's processes have not been able to adapt to this in terms of linking project outcomes to the evaluation of staff performance.

147. There is a need to examine and strengthen accountability loops in ADB by linking operational data explicitly to the performance management system of staff. In the current 1 year performance appraisal system, this linkage is largely absent and is certainly not done systematically. If ADB is to be successful in focusing more on achieving development results and less on loan approval, ways must be found to tighten the relationship between project success and promotion by more systematically considering development outcomes in staff performance appraisals.

148. ADB's efforts to strengthen the staff performance management system have not addressed the issue of linking the achievement of development results with individual staff assessments. Recent changes in ADB's performance development plan have sought to increase personal accountability for all staff by assessing staff performance against the delivery of an annual work program usually dominated by loan and TA approval. OED reports show that insufficient staff resources are allocated to project and TA administration. Past efforts to find a better balance between loan processing and portfolio management have failed. ADB's management systems do not reward staff associated with successful projects or TAs or hold staff accountable for projects or TAs that do not achieve their objectives or that experience difficulty during implementation. The analysis in this report, while preliminary, is the first attempt to see if a data base could be developed that would track medium- and long-term results that can be linked to individual staff members. More work should be done in this area—something that is essential if ADB wants to be an organization that is driven by the achievement of development results rather than one that is driven by the approval culture.

149. As a result of its participation in ECG, OED learned that the International Finance Corporation (IFC) does, in fact, track the performance of its loans/equity investments over time and rewards staff depending on the performance of their portfolio about 5 years after loan approval. The key features of IFC's Long Term Performance Awards Program are given in Box 4. However, its implementation is still in its early days. Among the issues under consideration that are of relevance to ADB are (i) how to extend the Program to cover staff working in core business areas, small and medium enterprises, and TAs; (ii) how to manage the impact of the Program on staff morale; and (iii) whether the Program could be applied to public sector projects in the World Bank—some people feel that it should be, while others believe that such would be difficult because of the different culture related to public sector lending and the lack of clear measures of profitability. ADB should assess the best practices in comparator institutions and develop indicators to include in the system to measure the achievement of development results.

Box 4: Key Features of IFC's Long Term Performance Awards Program

(i) A central tenet of the human resource strategy is to align staff incentives with accountability for results and to reward high performance.
(ii) The Program was put in place to balance the previous system of rewarding short-term results (e.g., productivity, approval, immediate success).
(iii) The Program was designed to encourage excellence in achieving development impact, profitability, project quality, and growth.
(iv) A measurement system was put in place to reward staff (teams as well as individuals) and managers with monetary incentives for actual results as they occur over time (i.e., basing rewards on ex-post performance rather than on ex-ante expectations).
(v) Rewards are given to individuals and teams that are consistently associated with high performing projects.
(vi) A methodological framework was developed giving equal weight to the financial impacts (measured by the Credit Risk Department) and development impacts (measured by the Operations Evaluation Department if the project has been rated).
(vii) Regional and sectoral benchmarks were developed to ensure fairness; a comparison of "like with like"; and that staff are not discouraged from, or disadvantaged by, working in difficult areas.
(viii) The performance data include all investment projects during the entire career of a staff member.
(ix) Awards are based on the performance of projects approved 5-7 years previously.
(x) There is wide consultation with staff on the measurement and selection criteria and the performance of their projects.
(xi) Transparent implementation, objective measures, close monitoring, and extensive consultation with staff are the key determinants of the success of the Program.

150. Complementing ADB's current staff evaluation system with a system that focuses on the achievement of development results would be a major human resources management challenge. If such a system were developed, it might change the staff incentives for the better and lessen the emphasis on loan approvals compared with achieving development results. If this challenge is successfully met, it could help ADB to emerge as a stronger and more effective institution that would be more responsive and relevant to client DMCs and better able to deliver results over the medium term.

151. There is scope to improve the focus on project quality at entry and project administration under the existing performance evaluation system, and this should be pursued. However, there is a need to strengthen the chain of accountability for achieving development results to complement the present staff performance appraisal system. The incentives of Management, senior staff, and staff need to be fully aligned. Therefore, to be effective, the chain of accountability for results would need to begin at the top, with Management and senior staff, and then cascade down to staff. It could not just focus on mission leaders and mission members. Information could be aggregated at the division, department, and regional levels to examine the performance of the loan and TA portfolios for which directors, directors general, and vice presidents are accountable.

152. A reliable, tested system would need to be developed to measure the results of long-term, complex projects, including the definition of the moment when a project can be considered completed and measurable. This is itself a major challenge that ADB and other MDBs are facing. In the absence of clear and understandable measurement tools, there would be the risk that a medium-term reward system would be wrongly applied and would not motivate ADB staff,

thus frustrating the purpose of the exercise. Expanding the performance evaluation system to include operational data would require careful consideration of the factors to be measured and incorporated in such a system. Consideration would need to be given to how to address the factors that are external to the performance of individual staff (e.g., impacts of bunching, staff overload, resource constraints, internal quality control and guidance by senior staff, capacity of the EA, ADB's corporate culture, and organizational changes). Consideration would also need to be given to issues such as innovation, complexity, and changing policy and institutional environments.

153. Such a system would need to include a basket of indicators covering a portfolio associated with each region, regional department, division, and operational staff involved in processing and administering loans and TAs. This basket of indicators would need to be chosen with care and could not just rely on project ratings in PPERs and PCRs. The basket should include indicators related to both the processing and administration of loans and TAs. ADB's loan and TA systems include a large number of indicators. For example, information is available on processing, project readiness criteria, early indicators of implementation (e.g., time required to make a loan effective or to recruit consultants for TAs), and development impacts as measured by PPERs and PCRs. Detailed information is available for every project in the Project Performance Management System and for every TA in the TA Management Information System.

154. One challenge will be to select a set of indicators that balances short-term and long-term incentives and reflects the fact that people move within ADB and leave the organization. Another challenge will be to find the right cutoff date. If it is too long (e.g., 7-8 years), many people will have left ADB or will no longer be involved in a project. If it is too short (e.g., 2-3 years), there will be little evidence of whether or not development results will be achieved.

155. While incentives, performance monitoring, and human resource issues are important factors to help ADB to better achieve development results, these measures must be developed in the broader strategic and operations planning and management context. Addressing human resource issues in isolation will not help ADB to better achieve development results. Successfully tackling the approval culture to better focus on achieving development results requires (i) institutional systems that effectively track operations (loans, TAs, CSPs, etc.) throughout their full cycle, including achieving development results; (ii) institutional operations planning and business processes that place greater emphasis and importance on post approval/project implementation; and (iii) departmental work programs and priorities that pay balanced attention to both processing and implementation. When (i) and (iii) are in place, departments can set incentives and objectively monitor/manage/assess staff.

156. Staff will believe that ADB is serious about changing its corporate culture only if it is made clear that ADB's staff appraisal process will, in some way, incorporate the achievement of project outcomes, i.e., development results over the mid- to long term, in addition to the delivery of an annual work plan. The first part of changing the corporate culture—a strong message from Management—has been done in the MTS II. The statements are clear. However, periodic messages from Management come and go and have an impact on ADB staff behavior only if they are followed up in a way that staff believe will directly affect them. Changing the way ADB staff are evaluated would be an important way to reinforce the message from Management included in the MTS II.

157. It will take several years to develop a system to incorporate the achievement of development results into the performance evaluation system for ADB staff. It will take time to examine the IFC experience and see if, or how, it could be adapted for ADB, particularly for

public sector operations, and how to normalize across sectors and countries so that the system does not provide ADB staff with an unintended incentive to avoid difficult development challenges. It will take time to integrate ADB's human resource and operational data bases. It will take time to develop systems to track outcomes for TAs and to identify portfolio indicators that relate to ongoing projects. However, if no action is taken in these areas, staff will probably not change their behavior solely because of the exhortations from Management in the MTS II.

158. Changing ADB's incentive systems to focus more on development results is consistent with commitments made in both the 2004 Human Resources Strategy and the MTS II. Thus the question is not *whether* to change the incentive systems that govern the behavior of ADB staff and Management. Rather the question is *how* this might be done. OED's purpose in raising this issue is to spark a debate in ADB as to how staff incentives can be realigned to focus on achieving development results.

VI. ACTING ON RECOMMENDATIONS AND LEARNING FROM LESSONS

A. Introduction

159. In its discussion of the 2005 AER, DEC recommended a separate chapter of the 2006 AER report on the status of follow-up actions to evaluation reports. This reflected DEC's belief that "*this is what the primary purpose of independent evaluation is all about, feeding lessons for improvement into operations and tracking how those lessons are being incorporated. It is more than quality control of the feedback system; it is the core of ADB's knowledge management process*."

160. In the theme chapter of its 2005 Annual Report to the Board of Directors, DEC stated that successful translation of evaluation recommendations into action depends on five elements: (i) quality of OED recommendations; (ii) quality of Management responses to, and decisions on, the recommendations; (iii) quality of DEC guidance, including what priority ADB should place on recommendations;[86] (iv) quality of staff implementation of Management decisions for action; and (v) efficient monitoring by Management, with specified accountability for action or inaction. DEC felt that the weakest link in the learning system was the last element.

161. Underlying this assessment was a fundamental question in DEC's mind: Have OED's independent evaluations made a significant impact in improving the design of new ADB operations, policies, and strategies? This uncertainty about OED's impact also led DEC to question its own influence on Board thinking and deliberations and on actions considered by Management in response to both OED and DEC recommendations.

B. Follow-up Actions on DEC and Management (Portfolio Action Plan) Recommendations in 2005

162. This section examines the current status of actions taken on recommendations made in (i) DEC's 2005 Annual Report, and (ii) Management's December 2005 Action Plan to Improve Loan and TA Portfolio Performance.

[86] This applies to the issues raised in the Annual Report of DEC and OED's broader evaluation studies. DEC rarely discusses the evaluation of individual projects.

1. DEC Recommendations

163. In its 2005 Annual Report, DEC reported that, based on its review of the *Annual Report on Loan and Technical Assistance Portfolio Performance for the Year Ending 31 December 2004*, it considered that actions taken on *five* of the nine recommendations remained *unsatisfactory* or *not yet satisfactory* as of August 2005. The following is an update on actions taken or not taken since August 2005 on the five outstanding DEC recommendations:

(i) **Pilot testing of aggregate ADB output reporting for selected sectors.** The recommended pilot testing of a report comparing the production of outputs against projections aggregated for all ADB projects in a sector has still not been carried out. No department feels compelled to take the initiative to address this issue. Action on the DEC recommendation remains *unsatisfactory.*

(ii) **Making project readiness criteria mandatory.** The problem of project startup delays remains unsolved, with loans having required an average of 8.2 months to become effective during 2005, as compared with the 4 month standard. Also, significant bunching of new loan approvals continued in 2005. The application of the project-readiness filters in Project Administration Instruction 1.01 remains voluntary. In 2005, although the regional departments affirmed that project readiness criteria were being seriously followed, including by some DMCs, DEC considered that a readiness checklist, signed off by the responsible department, remained the goal. Management's Action Plan to Improve Loan and TA Portfolio Performance (see next subsection) includes an initiative by which, from 2006, "all heads of departments will issue instructions to mission leaders and sector directors to submit a checklist of the status of each of the [project readiness] filters prior to each project processing stage." Accordingly, monitoring of action on this DEC recommendation will be shifted to monitoring this initiative in Management's Action Plan.

(iii) **Assessing development effectiveness in private sector operations.** The guidelines on the evaluation of ADB's private sector operations, currently being developed jointly by the Private Sector Operations Department and OED, will be completed in 2006. These will be based primarily on the Good Practice Standards of ECG. The measures of development effectiveness are to be specified in project design, monitored during implementation, and assessed at self-evaluation and independent evaluation. OED began working on an evaluation of ADB's private sector operations in 2006, with completion scheduled for 2007. Pending further demonstrated achievement, action on the DEC recommendation cannot yet be assessed as satisfactory, although work is under way in this area.

(iv) **Building flexibility in staff allocation so that project supervision, particularly of projects at risk, receives adequate attention.** The year 2005 saw the second lowest number of loan supervision missions and the second lowest number of projects reviewed during the 8 years from 1998 to 2005. The total number of person-days on mission during 2005 was just below the average for the previous 8 years. For TAs, the very low number of TAs with review missions each year suggests that TA administration remains weak. During 2005, only 18% of ongoing TAs had review missions, only 30% of newly approved TAs had inception missions, only 25% of advisory TAs had at least one mission of

any kind, and only 15% of ongoing regional TAs had at least one mission of any kind. Thus, action on the DEC recommendation is assessed to remain *unsatisfactory*, although OED notes that part of the supervision activities of resident missions, particularly activities that do not involve a mission, is not fully captured in ADB's management information systems. It may be that for delegated projects some of the review activities conducted by the staff of resident missions are not recorded as review missions. OED findings indicate that, according to EAs, projects delegated to resident missions are more closely supervised than projects administered from Manila. A different type of activity recording system is needed to understand more clearly the amount of effort that ADB as a whole is putting into project supervision activities. This will become increasingly important as more projects are delegated to resident missions.

(v) **Using critical path analysis in project preparation and implementation.** As in 2004, critical path analysis was not required or generally used during project preparation in 2005. In 2005, some training was provided for mission leaders, which was generally well received. The Action Plan to improve loan and TA portfolio performance (see next section) specifies that further training is to be provided. Accordingly, monitoring of satisfactory action on this DEC recommendation can be shifted to monitoring of this initiative under Management's Action Plan.

164. In its 2005 Annual Report, DEC made four new recommendations to ADB through the Board, namely that

(i) a system be put in place to monitor actions on annual DEC recommendations;
(ii) Management develop a comprehensive action plan, to be presented to the full Board, to address the key strategic issues analyzed in the *Annual Report on Loan and Technical Assistance Portfolio Performance for the Year Ending 31 December 2004*;
(iii) the portion of the AER on follow-up actions on OED recommendations be elevated to a separate chapter in the next AER, and a system be established for monitoring the cumulative progress of actions on OED recommendations; and
(iv) the proposal be implemented by SPD to report periodically to DEC, on behalf of Management, on progress in implementation of ADB's MfDR agenda.

165. This chapter of the AER is designed to fulfill the first half of recommendation (iii). Recommendation (i) and the second half of (iii) are being addressed by the ongoing development of a real-time Evaluation Information System. Operating within ADB's overall knowledge management framework, the information system will enable more efficient and timely access by user departments to the cumulative lessons from independent evaluations, as well as more efficient and timely feedback from responsible departments on actions taken on specific recommendations by DEC, Management, and OED. The corresponding chapter of the 2007 AER will benefit from use of the new system.

166. In response to recommendation (ii), in November 2005 Management circulated to the Board its *Action Plan to Improve Loan and Technical Assistance Portfolio Performance in Response to the 2004 Annual Report of the Operations Evaluation Department*. However, the recommendation that the action plan be discussed by the full Board when it considered DEC's annual report was not accepted. The President and Chairman of the Board decided not to include this item on the Board's agenda. Highlights of early actions taken to date on elements of

the action plan are provided in the next subsection. In fulfillment of recommendation (iv), SPD gave its initial briefing on the progress of MfDR in ADB at the DEC meeting of 24 November 2005. DEC will discuss semiannual MfDR progress reports starting in 2006. This has been built into DEC's 2006 work program.

167. Thus, actions taken on DEC's recommendations in its 2005 Annual Report may be considered satisfactory except for the lack of Board discussion on Management's action plan to improve portfolio performance. Responsibility within ADB for taking action on each was also relatively clear, though not explicitly mentioned. This contributed to ADB's ability to take appropriate action on the recommendations. Actions on two of the outstanding recommendations in DEC's 2004 Annual Report remain outstanding. The Task Force on the Action Plan to Improve Loan and TA Portfolio Performance in 2005 reviewed DEC's 2004 and 2005 recommendations and included some items to address the outstanding 2004 recommendations in the action plan (e.g., project readiness criteria, strengthening staff resources for project administration, introducing critical path analysis). However, since implementation of the action plan started only in 2006, it is too early to fully assess the outcomes. One lesson from the initial lack of progress on implementing the 2004 recommendations is the importance of identifying the focal unit responsible for initiating or coordinating the action related to DEC recommendations. It is recommended that DEC ask Management to specify responsible organizational units within ADB to address the outstanding recommendations when DEC meets to reassess their status in 2006.

2. Management Action Plan to Improve Loan and TA Portfolio Performance

168. OED's 2005 report on loan and TA portfolio performance[87] was particularly significant to DEC because it identified key trends, particularly in the OCR portfolio, suggesting that ADB's traditional products were no longer meeting many of the needs of its key clients, and that new products and less arduous procedures were needed to improve ADB's relevance and effectiveness. DEC agreed with Management's view in its response to the report that the OED recommendations were not sufficient to deal with the strategic issues identified. Thus, DEC asked Management to prepare a comprehensive action plan at the corporate level to address these issues. Successful implementation of the Action Plan, which includes the relevant components of the Innovation and Efficiency Initiative, has the potential to stimulate wide-ranging improvements in ADB's corporate performance.

169. Formulation of Management's Action Plan involved intensive preparatory work and consultations by an ADB-wide task force and shared many core components of ADB's Reform Agenda, which is coordinated and monitored by ADB's Management Committee. It has been only 5 months since the Action Plan was launched, so it is too early for Management to formally report on its implementation status to the Board. For purposes of this review, OED has done an initial stocktaking of early actions. The initial feedback indicates the following:

(i) **Enhance project administration efficiency.** Reviews are ongoing. Several actions included in the plan may need further elaboration. There are some initial concerns about budget allocation to fully implement the Action Plan.

[87] ADB. 2005. *Annual Report on Loan and Technical Assistance Portfolio Performance for the Year Ending 31 December 2004*. Manila.

(ii) **Improve TA portfolio management.** The process of reducing the TA portfolio has begun. The TA Reform Task Force is formulating initial conclusions on several issues and an OED evaluation of TA will be completed in 2007.

(iii) **Improve planning and timing of Board consideration of loans.** Two regional departments have introduced project readiness filter checklists for use during project processing. One question is whether such checklists will follow an ADB standard or be specific to regional departments or countries.

(iv) **Improve sector selectivity.** A new operational model for sector selectivity and focus was introduced in the MTS II.

(v) **Strengthen project monitoring and evaluation.** The Information Technology Committee has approved the use of an integrated approach for development of a Project Processing and Portfolio Management information system to provide end-to-end pipeline and portfolio support. Staff training on the design and monitoring framework continues.

(vi) **Increase and improve the OCR portfolio.** Initial policy work under the Innovation and Efficiency Initiative has been generally completed. There is now a functioning Risk Management Unit, but it may be understaffed.

C. Impact of Evaluation Findings on Board Proposals in 2005 and Early 2006

170. This section is a major addition to the AER. It examines the influence of evaluation findings on ADB operations, strategies, and policies approved by the Board in 2005 and in the first quarter of 2006. The assessment is based on reviews of Board documents, supplemented by interviews with mission/team leaders. The transcripts of the respective Board discussions were also reviewed, as were the records of comments provided by OED at the interdepartmental review and Management review stages. At the corporate level, policy and strategy Board papers that could potentially have used inputs from evaluation reports were reviewed. At the country level, CSPs endorsed by the Board in 2005 and early 2006 were examined. And at the project level, the report and recommendation of the President (RRP) for each of the project/program loans approved in 2005 was reviewed.

1. Incorporation of Evaluation Findings in the MTS II

171. The MTS II emphasizes sector selectivity and identifies core operational areas for ADB at the corporate level. Selectivity and focus are recognized as an important determinant of ADB's ability to deliver quality development results. ADB has recognized that it cannot be effective in all sectors in all countries. The MTS II provides a framework for making choices and setting priorities. Sector selectivity and focus was a key recommendation in five of the six CAPEs that fed into the six CSPs endorsed by the Board in 2005 and in the first quarter of 2006. It has also been a key message of many past evaluation reports.

172. The MTS II classifies sectors into three groups: (i) Group I: core operational sectors where ADB will build up a critical mass of expertise to act as a leading provider of assistance (financing and expertise); (ii) Group II: sectors for which building ADB's expertise or capacity is not a priority but which are important for ADB to be able to meet the diversity of needs across DMCs; and (iii) Group III: sectors with limited demand for ADB services and in which ADB's

performance has sometimes been poor—ADB operations in these sectors are to be gradually phased out (see Table 7).

Table 7: MTS II Priority Classification of Sectors
(% successful projects shown in brackets)

Group I	Group II	Group III
• Road transport (89%) • Energy (80%) • Urban infrastructure (water supply, sanitation, waste management, and urban transport) (65%) • Rural infrastructure (roads, power, irrigation, and water management) (54%) • Education (70%) • Financial sector (67%)	• Agriculture and natural resources (except fisheries, livestock, irrigation and water management) (43%) • Railways (42%) • Health (50%) • Trade (RCI related) (n.a.) • Law and the judiciary (n.a.) • Public finance and economic management (n.a.)	• Fisheries (33%) • Livestock (20%) • Civil aviation (75%) • Water transport (79%) • Communications (90%) • Development finance institutions (49%) • Housing construction (n.a.) • Industry (66%) • General government administration (n.a.)

n. a. = ratings not available, RCI = regional cooperation and integration.

173. Evaluation findings were one of the criteria used to classify sectors into these three groups. Other factors included the expected demand from DMCs for assistance, strategic considerations, and broad development trends in the Asia and Pacific Region. The average project success rate for each sector is shown in parentheses in Table 7. With some exceptions, the MTS II generally assigns higher priority to well-performing sectors. This is particularly evident for the Group I sectors. While the project success rate of rural infrastructure is relatively lower at 54%, it is included in Group I because it is the best performing rural subsector. Project success rates are consistently lower for Group II sectors than for Group I sectors. Three of ADB's poorest performing sectors (fisheries, livestock, and development finance institutions) are in Group III. Group III also includes some sectors in which ADB experienced success (e.g., civil aviation, water transport, and communications). However, future demand from DMCs for ADB financing in these sectors is expected to be limited. Overall, there is significant congruence between evaluation findings and the sectoral prioritization in the MTS II. In particular, staff preparing the MTS II drew on the 2005 AER when considering the sectoral prioritization.

2. Country Strategies and Programs

174. Experience in 2005 through early 2006 suggests that the influence of CAPEs on the formulation of new CSPs has become a mainstream process. The Board does not normally discuss a CSP until after DEC has considered the corresponding CAPE and informed the full Board of the Committee's views based on CAPE findings. To formalize this process and strengthen the CAPE-CSP feedback process, in its discussion of the Uzbekistan CAPE in 2006 DEC recommended that for the Uzbekistan CSP and all future CSPs consideration be given to including in the CSP

(i) a section explaining specifically how the strategy has been translated into an operational program, so that the linkage is clear;
(ii) a section explaining how lessons learned from past portfolio performance are taken into account in the CSP; and

(iii) an appendix documenting the CAPE's as well as DEC's recommendations based on its discussion of the CAPE, with an explanation of how these recommendations are taken into account in the CSP.

175. These DEC recommendations will be incorporated in the enhanced format and business processes that are being finalized for CSPs (to be renamed country partnership strategies, or CPSs).

176. All six CSPs discussed by the Board in 2005 and early 2006 were reviewed to assess whether they were influenced by their respective CAPEs. In all six cases, most if not all of the corresponding CAPE recommendations were used as major inputs. Interviews with the operations staff confirmed that the influence of CAPEs on CSPs went substantively beyond the references that are mandated in the CSP format. The general lessons from the CAPEs that influenced the six CSPs clustered around the following areas:

(i) Future assistance should be prioritized based on better selectivity and focus, with successful ADB performance in a sector as one key criterion.
(ii) CSPs should be results based—the lack of clear monitorable indicators made it difficult to evaluate past CSPs. This constitutes a pillar of the MfDR agenda.
(iii) Success has been greatest when ADB maintains a long-term involvement in a sector and combines programs of capacity building with investment support.
(iv) Projects and programs using relatively simple designs that are firmly rooted in local conditions are more likely to succeed than complex interventions.
(v) Steps must be taken to strengthen the impact of the TAs used to support policy reform, capacity building, and institutional strengthening.
(vi) ADB should deepen its relationships with broader society (including NGOs, women's groups, and indigenous peoples groups), as this often helps to achieve better development results.
(vii) ADB should intensify its coordination with development partners and stakeholders.
(viii) Governance, including the need to control corruption, should be explicitly addressed in CSPs, and not just as a cross-cutting theme.
(ix) The understanding of corruption and the risks that it has for ADB operations remains superficial in CSPs.
(x) Failure of project designs to recognize and address institutional weaknesses in implementing agencies early on leads to weak project performance.

3. Individual Loan Proposals

a. Incorporation of Evaluation Lessons in 2005 Loan Proposals

177. Each of 58 individual project/program loan proposals brought to the Board in 2005 was reviewed to assess the degree to which OED lessons were reflected. Lessons from relevant OED reports were explicitly incorporated in 24 or 41% of the RRPs. The evaluation lessons used came mostly from related PPERs, with a few from related TA Performance Evaluation Reports (TPERs), CAPEs, SAPEs, and SESs. In all but two cases, OED had provided feedback at the interdepartmental and Management review stages. However, such feedback generally involved only presentational improvement of the RRP; feedback is considered to have influenced a substantive change in project or program design or implementation plan in, at most, only 10 or 17% of the loan proposals.

178. The review of the incidence of general evaluation lessons being incorporated in new loan proposals is constrained by (i) the "newness" of many loan proposals made in 2005, for which pertinent evaluation lessons may not have been available; and (ii) the absence of an efficient information system by which operations staff can readily tap into the existing body of evaluation knowledge. An assessment of the operational influence of individual project/program evaluations may also be obtained from tracking the extent to which specific follow-up actions in OED reports are actually implemented by EAs or ADB. The results are reported below.

b. Follow-up Actions Recommended in 2005 Evaluations

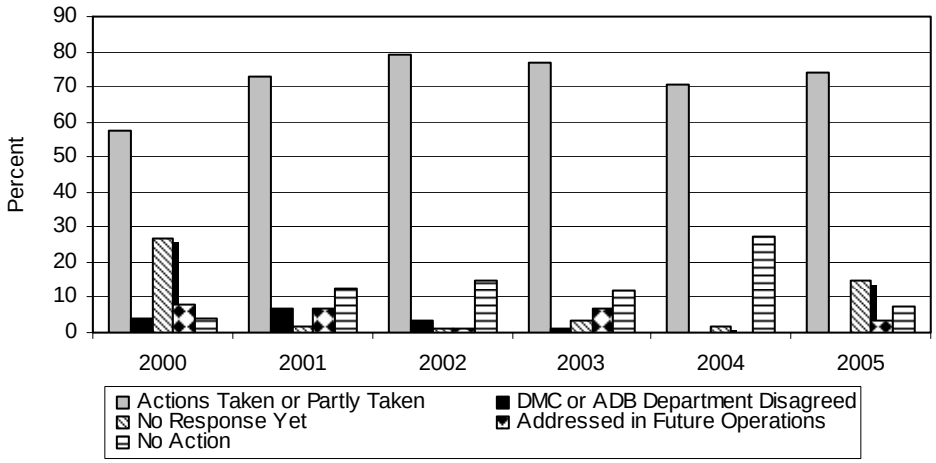
179. Follow-up actions recommended in evaluation reports will be implemented only if they are specific, monitorable, actionable (practical), relevant, and time bound. A review of the follow-up recommendations in 2004 reports concluded that they were less specific than in 2003. Specificity improved for reports circulated in 2005. All recommendations specified *what* was to be done and *who* should undertake the action, though 8% of the recommended follow-up actions did not indicate *when* the action should be taken.

180. Appendix 13 provides a statistical summary of the follow-up actions recommended in 2004 and 2005 evaluation reports. Recommendations addressed to EAs are distinguished from those addressed to ADB, and within each category, those recommendations specific to the project or sector evaluated are separated from those involving action of a more general nature. Appendix 14 provides information on the current extent of implementation of actions recommended in 2004 and 2005 OED reports.

181. The status of implementation of follow-up actions recommended in PPERs/TPERs since 2000 is shown in Figure 3. No action was taken for 14 recommendations made in 2004 OED reports, more than a quarter of the total; 11 were addressed to DMCs and 3 were addressed to ADB. For the recommendations that did not result in action, the reason generally given for lack of progress was that ADB was no longer operating in the sector, either through a follow-on loan or ongoing TA. For the 46 actions addressed to DMCs in 2004, action was taken or partly taken for 27 or 59% (see Appendix 14). This represented a decline from the over 70% recorded during 2001–2003. ADB acted on 64% of recommendations addressed to it in 2004. There was better implementation of follow-up actions recommended in 2005 reports that were addressed to DMCs, with action taken or partly taken in 74% of them. ADB's performance, however, declined from 2004, with follow-up actions implemented for not more than 60% of the recommendations addressed to ADB in 2005 OED reports.

182. There is a basic limitation in the approach of reporting on actions taken on the recommendations in OED reports. OED limits its individual project/program performance evaluations to a sample of 25% of completed operations. Therefore, even if there were action on 100% of resulting OED recommendations, a question remains as to the follow-up actions relating to the other 75% of the completed portfolio. Since self-evaluation is required for all completed operations, and PCRs include recommendations for follow-up actions, greater attention should instead be given to systematic monitoring of actions taken on the recommendations in the PCRs, with OED continuing to do selective reviews of draft PCRs. This would provide a more solid basis for an overall assessment of whether ADB is making progress as a learning organization in its operations.

Figure 3: Status of Implementation of Recommendations in PPERs/TPERs Completed in the Given Year



c. Feedback from Mission Leaders

183. To supplement and validate the desk reviews on evaluation's impact on individual operations, 20 mission leaders for loan proposals brought to the Board in 2005 were interviewed. Of these, 11 confirmed the evaluation lessons learned for their projects as documented in the RRPs. Some mission leaders also offered further insights learned from evaluation reports that influenced project preparation but were not necessarily documented in the RRPs. The other nine mission leaders felt that there was no evaluation report on hand that had significant relevance to the preparation of their projects.

184. The three OED reports most appreciated by the mission leaders interviewed were (i) *Special Evaluation Study on the Effectiveness of Participatory Approaches*[88] (2004), which also influenced the revision of ADB's guidelines on participation; (ii) *Special Evaluation Study on Project Implementation Units* (2004), which guided ADB's response to the Paris Declaration's agreement on the use of Project Implementation Units; and (iii) *Country Assistance Program Evaluation for Bangladesh* (2003).

185. For OED, however, perhaps the most important feedback from mission leaders was on the effectiveness of OED reports themselves and areas that could be improved. These included

(i) failure of some performance evaluations to place the ADB operation in the proper context; some programs were often prepared in situations of severe stress for the sector under consideration, and yet OED reports often tended to minimize the importance of the need for a quick response by ADB;

(ii) absence of findings specific enough to contribute to the formulation of a follow-on project; and

[88] As recommended in that evaluation report, ADB issued new guidelines (ADB. 2006. *Strengthening Participation for Development Results: A Staff Guide to Consultation and Participation*. Manila). In addition to drawing on the 2004 evaluation, the new guidelines also draw on several other OED evaluations (ADB. 1999. *The Role of NGOs and Community-Based Organizations in Asian Development Bank Projects*. Manila; ADB. 2001. *Participatory Development Processes in Selected Asian Development Projects in Agriculture, Natural Resources, and Social Infrastructure Sectors*. Manila; ADB. 2003. *Participatory Approaches in Forest and Water Resource Operations in Selected Developing Member Countries*; Manila).

(iii) lack of consistency in the quality of OED reports, with some not providing sufficiently thorough lessons or relevant recommendations.

186. In the case of projects evaluated as less than successful, mission leaders said it would be desirable if the evaluations could provide clearer insights as to whether ADB should have stayed away from the concerned project/geographical area/sector and whether a different design and approach would more likely have been successful. Evaluations should also avoid concluding that ADB should stay away from an entire sector because of the mixed performance of its past interventions in that sector.

187. Mission leaders suggested that for OED to be more effective it should hold dissemination workshops for target clients as part of a continuous improvement program for ADB operations. Such a program should be required so that project teams understand that learning lessons from evaluation to improve future performance is a serious commitment. Devoting time to attending such a workshop and actively participating in the discussions at the workshop would be an indicator that ADB is becoming more of a learning institution.

4. Board Discussions

188. Transcripts of the discussions of the Board papers were examined to search for explicit references in Board members' interventions to evaluation lessons and recommendations. Only ten such instances were identified. These were in Board discussions of the Annual Report of the DEC; the CSPs for Bangladesh, Bhutan, Cambodia, and Uzbekistan; and five individual loan proposals.

189. The analysis suggests that, as an overall conclusion, OED results are not referred to often or in depth in the statements of Board members. Staff and Management could interpret this as demonstrating that the Board does not place a high priority on learning from past experience to improve future operations.

5. Overall Impact Assessment

190. From the above analysis, it may be concluded that evaluation feedback did have some influence on Board proposals in 2005 and early 2006. The OED reports most significantly used as inputs in the preparation of Board proposals were:

(i) *Annual Report on Loan and Technical Assistance Portfolio Performance for the Year Ending 31 December 2004*;
(ii) CAPEs for Bangladesh, Bhutan, Cambodia, Indonesia, Mongolia, Philippines, and Uzbekistan;
(iii) SAPE on Power Sector in Bangladesh;
(iv) SAPE on Power Sector in the Philippines;
(v) SES on Program Lending;
(vi) SES on Effectiveness of Participatory Approaches;
(vii) SES on Project Cost Estimates;
(viii) SES on Project Implementation Units; and
(ix) 2005 AER.

191. OED's influence at a strategic level was evident in (i) Management's Action Plan to improve portfolio performance, which resulted from DEC's discussion of OED's annual report on portfolio performance; and (ii) the use of OED findings to identify the sector classification set out

in the MTS II. These, however, are considered unique, one-off corporate-level opportunities that would not be repeated every year.

192. Of a more regular and systemic nature was the significant progress achieved from 2004 to 2006 in strengthening and mainstreaming the influence and feedback process between CAPEs and subsequent CSPs. This is a positive finding, because CSPs have become the key strategic instruments to set priorities for ADB operations in a country. Thus, among OED products, CAPEs currently have the clearest, most direct, and most systematic influence on ADB operations.

193. There remains significant room for improvement in institutionalizing evaluation feedback: (i) the Work Program and Budget Framework (WPBF) is ADB's medium-term business plan—it should be influenced to some extent by evaluation findings; the WPBF, 2006–2008, however, does not make any explicit reference to lessons from evaluation; (ii) less than half of the loan proposals considered by the Board in 2005 made explicit references to evaluation lessons and recommendations; (iii) the new business processes for loan processing have done away with the opportunity for evaluation lessons to be considered adequately early in the project design process; (iv) OED comments at the interdepartmental review and Management review stages often focus on suggestions to improve the presentation of the Board paper—an opportunity has been lost to clearly summarize OED lessons of relevance to the project and to feed those lessons into the project processing process; (v) there is limited reference to evaluation findings during Board discussions, with only a limited number of chairs making some reference to evaluation findings; (vi) a more efficient and practical means must be developed to make the body of evaluation findings more accessible to, and used by, ADB staff.

194. More effort is needed to make ADB a learning organization in terms of using OED findings to improve the design of future operations. The work that began in 2006 to create a more systematic way to track the action taken on the recommendations in OED reports is a step in the right direction as was DEC's recommendation to defer the completion of CSPs until DEC had considered the corresponding CAPE. Other steps that should be taken include: (i) to defer the finalization of selected policy reviews until after DEC has considered the corresponding evaluation; (ii) OED to invest more resources in knowledge management and dissemination activities; (iii) OED to prepare concise compendiums of lessons by sector/subsector and country; and (iv) OED to develop measurable indicators to monitor whether ADB is becoming a learning organization.

195. In addition to OED's work, the DEC can also help ADB to become a learning organization. Its 2005 annual report identified the following areas where the DEC can enhance its contribution to the lessons learning and implementation process:

> "(i) focusing its discussions on major OED reports (special evaluation studies on a development issue or of a thematic nature, country and sector assistance program evaluations, ADB policy evaluations, the annual reports) and discussing an individual project/program performance evaluation only on an exceptional basis (in calendar year 2005, no individual PPAR or TPAR was discussed by the DEC);
>
> (ii) ensuring that DEC discussions of the related evaluations precede and feed into full Board discussions of policies and strategies. Specifically, just as the lessons learned from an individual operation performance evaluation report are fed into the design of a related new operation, the lessons learned from a country assistance program evaluation (CAPE) should feed into the next country strategy and program (CSP); those from a sector assistance program

evaluation into the review of a sector strategy; those from evaluation of the effectiveness of ADB policies, procedures and practices, into future reviews of these; and those from annual reviews of overall evaluation results, into future medium term strategies (MTS) of ADB;

(iii) ensuring, through the interventions of DEC members at Board discussions, that the full Board actively uses lessons from evaluations in its deliberations;

(iv) if called for, exercising the discretion to request the Chairman of the Board to include a major evaluation issue in the agenda of a Board meeting; and

(v) calling on Management for actions that are beyond the scope or competence of OED to propose."[89]

[89] ADB. 2005. *Annual Report of the Development Effectiveness Committee.* Manila, para. 54.

OED REPORTS AND WORK PROGRAM

Table A1.1: Evaluations Completed In 2005

Ref. No.		Title	Loan/TA No.	Country	Rating
		PROJECT/PROGRAM PERFORMANCE AUDIT/EVALUATION REPORT (PPARs)			
PE-659	1	Higher Education Project	1253	INO	S
PE-660	2	Industrial Energy Efficiency Project	1343	IND	PS
PE-661	3	Social Sector Program	1611	THA	PS
PE-662	4	Capital Market Development Program	1580SF	BAN	PS
PE-663	5	Second Industrial Energy Efficiency and Environment Improvement Project	1436	PRC	S
PE-664	6	Financial Sector Intermediation Loan	1371	PAK	US
PE-665	7	Basic Skills Project	1368SF	CAM	S
PE-666	8	Irrigation and Flood Protection Rehabilitation	1259SF	VIE	S
PE-667	9	Capital Market Development Program	1576/1577SF	PAK	S
PE-668	10	Bangkok Urban Transport Project	1195	THA	HS
PE-669	11	Rural Credit Project	1457SF	VIE	S
PE-670	12	Champasack Road Improvement Project	1369SF	LAO	HS
PE-671	13	Energy Conservation Project	1492SF	MON	PS
PE-672	14	Financial Sector Program Loan and Institutional Strengthening of the Financial Sector Project	1601/1602	KOR	HS/S
PE-673	15	Road Rehabilitation Project	1455	KAZ	S
PE-674	16	Anhui Environmental Improvement for Municipal Wastewater Treatment/Industrial Pollution Abatement	1490/1491	PRC	S
PE-675	17	SBI DFHI Limited	Inv 7122	IND	S
PE-676	18	Health and Population Project	1316SF	RMI	PS
PE-677	19	Hunan Lingjintan Hydropower Project	1318	PRC	S
		TECHNICAL ASSISTANCE PERFORMANCE AUDIT/EVALUATION REPORTS			
TE-53	1	Capacity Building to Support Decentralization in INO	3177/3178/3179/3326	INO	PS
		SPECIAL EVALUATION STUDY			
SS-63	1	Role of Project Implementation Units			
SS-64	2	ADB Policy for the Health Sector			
		COUNTRY ASSISTANCE PROGRAM EVALUATION			
CE-9	1	Bhutan		BHU	
CE-10	2	Indonesia		INO	
		SECTOR ASSISTANCE PROGRAM EVALUATION			
SE-2	1	Social Sectors in Pakistan		PAK	n.a.
SE-3	2	ADB Assistance to Philippines Power Sector		PHI	PS
SE-4	3	Agriculture and Natural Resources Sector in Lao PDR		LAO	PS

HS = highly successful, n.a. = not applicable, PS = partly successful, S = successful, US = unsuccessful.

Table A1.2: Outline Work Program For Evaluation Reports, 2006–2008
Operations Evaluation Department, Asian Development Bank

	2005	2006	2007	2008
Annual Reports				
Annual Evaluation Review (Theme Chapter)	1 (Changes in Project Performance; the Energy Sector)	1 (Determinants of Project Performance and Lessons from Successful Projects)	1 (Capacity Building)	1 (Regional Cooperation and Integration)
Annual Review Portfolio Performance (incorporating Special Studies for 2006 Loan and TA Portfolio Assessment[1])	1	1	1	1
Evaluation Highlights	1	1	1	1
Country Assistance Program Evaluations (CAPEs)	BHU INO LAO **PAK** **UZB**	IND PRC SRI	MON NEP CARs Regional Pacific Regional	BAN BHU
Studies Related to CAPEs	Agriculture Sector Assistance Program Evaluation (SAPE) in Lao PDR[1] **Road SAPE in IND[1]** Social SAPE in PAK[1] Road and Road Sector Assessment Study, PAK[1]	**Energy SAPE in IND[1]** **Public and Local Government Administration in India (TPER)** Building Country Systems in the PRC[1] (TPER) Transport (Roads and Railways) SAPE in PRC[1] **Law and Development in PRC (TPER)** **Regional Cooperation in CARs**[1]	BAN SAPE (TBD) Water SAPE in Nepal	TBD TBD

Note: Items highlighted in **bold** are 2006 deliverables.

	2005	2006	2007	2008
		ADB's Support for Rural Development in the CARs[1] Environmental Management in CARs (TPER)[1, 2]		
Special Evaluation Studies A. Thematic	Power SAPE in PHI[1] **Capacity Development in SRI**[1] **Civil Society Organizations** **Poverty Exit and ADB Projects Targeting Poverty** **Capital Market Assistance** **Joint Evaluation of GEF Projects**	**Effectiveness of ADB's Operations in Support of Capacity Development** Governance Country Study (Pakistan)[1, 2] **Evaluation of Private Sector Operations**	Evaluation of ADB's Support for Regional Cooperation and Integration Evaluation of Selected Special Funds for Poverty and Lessons for Scaling-up/Replicability for ADB Lending (e.g., JFPR; DFID)	Effectiveness of ADB's Approach to Policy Dialogue and Reform (incorporating an Assessment of Degree of Country Ownership in ADB Operations and Evaluation of Program Lending and Use of Conditionality) Evaluation of Results from MTS 2006–2008 Implementation
B. Policies and Procedures	**Effectiveness of TA Operations** Effectiveness of ADB's Partnering Approaches (Phase 1: PFTAC) **Evaluation of Fisheries Policy** Evaluation of Health Sector Policy Role of Project Implementation Units **Urban Sector Policy and Operations**	Effectiveness of the Sector Development Program Modality **Effectiveness of ADB's Energy Policy** Effectiveness of ADB's Approaches to Partnering and Harmonization (Phase II) Performance of ADB's Operations in Support of Rural Development **Effectiveness of ADB's Microcredit Operations**	Effectiveness of ADB's Adoption of Managing for Development Results (incorporating Evaluability of Country and Project Level Operations) Results Obtained from the Implementation of ADB's Governance and Anti-Corruption Policies Effectiveness of ADB's Support for Decentralization	Evaluation of the Results of the Innovation and Efficiency Initiative Effectiveness of ADB's Approach to Transport Development Results from ADB's Water Policy Implementation Evaluation of Project Level Financial Analysis and Financial Management

Note: Items highlighted in **bold** are 2006 deliverables.

	2005	2006	2007	2008
		Evaluation of ADB's Safeguard Policies	Evaluation of ADB's Accountability Mechanisms	Effectiveness of ADB Operational Policies: Focus and Redundancy Effectiveness of ADB's Resident Mission Policy
Public Sector PPERs	21	**21** (7 = carryover from 2005; 14 = 2006)	17	17
Private Sector PPERs	1	**3** (2 = carryover from 2005; 1 = 2006)	3	3
Real Time Evaluations		**Project Monitoring and Management**	Effectiveness of Project Operations Quality Control/Systems Processes	TBD
Technical Assistance Program Evaluation (TPER)	Capacity Building to Support Decentralization in INO[1]		Poverty Monitoring	TBD
Others	ECG Activities RETA for Selected Evaluation Studies for 2005 OED Follow-up Actions to Independent Assessment Panel Report **Guidelines for Country Assistance Program Evaluations** Guidelines for Project Performance Evaluation Reports	**ECG Activities** **RETA for Selected Evaluation Studies for 2006**	ECG Activities RETA for Selected Evaluation Studies for 2007	ECG Activities RETA for Selected Evaluation Studies for 2008

Note: Items highlighted in **bold** are 2006 deliverables.

	2005	2006	2007	2008
	Guidelines for Private Sector Operations Evaluations SSTA on Urban Sector Strategy and Operations **TA 4581-PRC: Developing a Result-Based Monitoring and Evaluation System for Key Projects**	Implementation of TA 4581-PRC: Developing a Result-Based Monitoring and Evaluation System for Key Projects	Implementation of TA 4581-PRC: Developing a Result-Based Monitoring and Evaluation System for Key Projects	

ADTA = advisory technical assistance; AER = annual evaluation review; BAN = Bangladesh; BHU = Bhutan; CAPE = country assistance program evaluation; CARs = Central Asian republics; DMC = developing member country; ECG = Evaluation Cooperation Group; GEF = Global Environment Facility; IND = India; INO = Indonesia; LAO = Lao People's Democratic Republic; NGO = nongovernment organization; PAK = Pakistan; PPER = project/program performance evaluation report; RETA = regional technical assistance; SAPE = sector assistance program evaluation; TA = technical assistance; TBD = to be determined; TPER = technical assistance performance evaluation report; UZB = Uzbekistan.

[1] Inputs for later broader evaluations other than CAPEs.

[2] Start may slip to 2007.

Note: Items highlighted in bold are 2006 deliverables.

Table A1.3: Sample of Project/Program Evaluation Reports Included in the 2006 Work Program

	Loan	Country	Project Name	PCR Rating	PCR Circulation
A. Project Performance Evaluation Reports					
1	1381	BAN	Small-scale Water Resources Development Sector Project	S	Jul-04
2	1402	SRI	Plantation Reform Project	S	Dec-04
3	1504	UZB	Rural Enterprise Development	S	Oct-03
4	1435	PHI	Rural Microenterprise Finance Project	HS	Feb-05
5	1339	INO	Capacity Building Project in the Water Resources Sector	S	Aug-05
6	1541/1542	KAZ	Basic Education Project	PS	Dec-03
7	1480/1481	IND	Private Sector Infrastructure Facility - ICICI	S	Sep-03
8	1633	KGZ	Flood Emergency Rehabilitation	S	Dec-03
	1714	TAJ	Emergency Flood Rehabilitation	S	Jun-04
9	1269	PHI	Municipal Water Supply or	S	Oct-03
	986	PHI	Angat Water Supply Optimization Project	PS	Oct-04
	1150	PHI	Manila South Water Distribution Project	US	Nov-04
	1379	PHI	Umiray-Angat Transbasin Project	S	Nov-04
10	1501	INO	Regional Development Account Project	US	Apr-05
11	1387	PRC	Hebei Expressway	HS	Dec-03
	1617	PRC	Hebei Roads Development Project [a]	HS	Jun-05
12	1470	PRC	Chongqing Expressway Project	S	Sep-04
	1638	PRC	Chengdu-Nanchong Expressway Project [a]	S	Dec-04
13	1298/	BAN	Jamuna Bridge	HS	Dec-00
	1478	BAN	Jamuna Bridge Access Roads Project	S	Aug-04
14	1641/	PRC	Changchun-Harbin Expressway Project (Hashuang Expressway)	S	Oct-04
	1642		Changchun-Harbin Expressway Project (Changyu Expressway)	S	Oct-04
B. Program Performance Evaluation Reports					
1	1506	IND	Gujarat Public Sector Resource Management Program	S	Dec-04
2	1675/1676-	INO	Health and Nutrition Sector Development Program	S	Jun-05
3	1507/1508	MON	Education Sector Development Program	HS	Dec-03
4	1618	INO	Financial Governance Reforms: Sector Development Program	S	Aug-04
5	1713	MON	Governance Reform Program	S	Dec-02
6	1733/1734	VIE	State-Owned Enterprise Reform and Corporate Governance Program	S	Dec-04
Can be brought forward:					
	1717	IND	Madhya Pradesh Public Resource Management Program	S	Dec-04

HS = highly successful, PS = partly successful, S = successful, US = unsuccessful.

[a] Brought forward (started operations in December 2003).

Box A1: Harmonizing Evaluation Results Among Multilateral Development Banks (MDBs)

The heads of the evaluation departments of the African Development Bank (AfDB), the Asian Development Bank (ADB), the European Bank for Reconstruction and Development (EBRD), the Inter-American Development Bank (IDB), and the World Bank Group (including the World Bank, the International Finance Corporation [IFC], and the Multilateral Investment Guarantee Agency) established the Evaluation Cooperation Group (ECG) in October 1995. ECG expanded its core membership to include the European Investment Bank (EIB) (1998) and the International Monetary Fund's Independent Evaluation Office (IEO) (2001). Two other institutions attend ECG meetings as observers: the United Nations Development Programme as the representative of the United Nations Inter-Agency Working Group on Evaluation, and the Development Assistance Committee of the Organization for Economic Cooperation and Development (OECD/DAC) Network on Aid Evaluation. ECG is represented at the OECD/DAC Evaluation Network meetings.

In 1996, the report of the Development Committee Task Force called for the multilateral development banks (MDBs) to harmonize evaluation methodologies, performance indicators, and criteria. The MDB presidents endorsed these recommendations in 1998 and called for "further intensification of collaboration among MDB evaluation units in harmonizing evaluation standards…" Thus ECG's mandate focused on harmonization of evaluation principles, standards, and practices. ECG also addresses issues related to accountability, learning from past experience, sharing lessons, and strengthening their use.

ECG uses two main instruments to promote harmonization: (i) developing good practice standards (GPSs), and (ii) using the GPSs to assess and compare EGC members in benchmarking studies. Benchmarking studies assess the extent to which the relevant GPS is being applied by the ECG members, but not the quality of the evaluations undertaken. A report on ECG's harmonization work was presented to the MDB presidents at their March 2005 meeting in Paris. The report emphasized the need for upstream harmonization within MDBs, the importance of comparability of results, the limits on harmonization because of the unique features of each MDB, and the importance of sharing lessons learned.

Private Sector Operations Evaluation. For private sector operations, ECG prepared a first set of GPSs, which was followed by a benchmarking study. The results of the benchmarking study resulted in a refinement of the GPSs. ECG's second benchmarking exercise on private sector operations evaluation was completed in 2004. While progress had been made by most of the institutions towards harmonization, there remained some issues. The report was made public on ECG members' websites and on the OECD/DAC website. As a result of this benchmarking study, the GPSs for private sector evaluations were further revised, and the third edition of the private sector GPSs was approved by ECG in 2006. EBRD and IFC played the lead role in this area.

Public Sector Operations Evaluation. ECG has developed GPSs for public sector lending. Work began in 2006 on a benchmarking study of public sector investment operations based on the GPSs. The World Bank is playing the lead role.

Policy-Based Lending Evaluation. ADB took the lead in developing the GPSs for policy-based lending. The report was endorsed by ECG in 2005 and is publicly available. There was general consensus that these GPSs should be used as the basis for a benchmarking study of the practices of ECG members in evaluating program loans. However, this benchmarking study will not be undertaken until after the benchmarking study for public sector investment operations is completed.

Country Assistance Program Evaluations. ECG agreed that GPSs should be developed for country assistance program evaluations. As a first step, there was an in-depth discussion on country-level evaluations during the ECG meeting in Manila in October 2005, which allowed ECG members to share their experiences. Work in this area will begin in 2006, with ADB taking the lead role.

Technical Assistance Evaluations. In 2006, ECG agreed to begin work on GPSs for evaluating technical assistance, with IFC taking the lead role. A benchmarking exercise against the GPSs will be undertaken once there is agreement on the GPSs.

[1] Development Committee, "Report from the Multilateral Development Banks on Implementation of the Major Recommendations of the MDB Task Force Report," March 26, 1998.

SELECTION OF SECTORS WITH SUCCESSFUL PROJECTS

1. **Agriculture and Natural Resources**: The agriculture/natural resources sector includes seven subsectors. Of these, only the irrigation/rural development subsector had more than 10 successful projects that were approved in the 1990s (23 [67%] of 34 projects were rated successful). Although there were 20 rated agricultural support services projects, only 11 (55%) were successful. Only a small number of rated projects were approved in the 1990s in the other agriculture subsectors. The analysis of the agriculture/natural resources sector focused on irrigation projects, the agriculture subsector assigned the highest priority in the Medium-Term Strategy II, 2006–2008 (MTS II). To increase the sample size, a longer time frame than 1990 approvals was used for this sector. Since ADB experiences problems in the agriculture sector, it is important to learn from successful projects to improve the achievement of development outcomes.

2. **Energy**: The energy sector, a priority Group I sector in the MTS II, has five subsectors. However, only the electric power subsector had more than 10 successful projects that were approved in the 1990s (47 total approvals with a success rate of 87%, or 41 successful projects). The analysis of the energy sector focused on the power projects.

3. **Finance**: Of the 15 rated development finance institution (DFI) lines of credit approved in the 1990s, only 7 (47%) were rated successful. These types of projects were included in Group III in the MTS II. ADB is expected to wind up its operations in this area.[1]

4. **Industry**: The sample of industrial projects is too small to be included in the analysis – only eight such projects approved in the 1990s have been rated. According to the MTS II, industry will not be a core area of future ADB operations.

5. **Multisector**: Although 17 (68%) of the 25 rated multisector projects approved after 1990 were successful, this category includes a diverse group of projects. It is not clear that lessons would be generalizable.

6. **Social Sectors**: There were enough successful projects for water supply (20 [71.4%] of 28 projects were successful) and education (32 [76%] of 42 projects were successful) to be included in the analysis. Both are among the Group I sectors in the MTS II. While 13 (81%) of 16 urban development and housing projects were successful, because of the significant differences among these projects, lessons would not be generalizable. Also, housing is a Group III sector in the MTS II. The health and population sector, a Group II sector in the MTS II, did not have a sufficient number of successful projects to be included in the analysis (7 [50%] of 14 rated projects were successful). The analysis in the social sectors focused on water supply and education.

7. **Transport and Communications**: The road sector is the only part of the transport sector included in Group I in the MTS II. Most road projects are successful (42 [91%] of 46 rated projects approved in the 1990s). There were too few ports, airports, and railway projects to be included in the analysis; all of these sectors are Group III in the MTS II. Although the telecommunications sector meets the minimum sample size (all 10 rated projects approved in the 1990s were successful), ADB expects to wind up its operations in this sector.

[1] Program lending is an important lending modality in the financial sector. If program loans were included in the financial sector, it would meet the criteria of having 10 successful operations. However, it is not clear that the lessons of experience would be common between DFI lines of credit and program loans.

PROJECT PERFORMANCE BY COUNTRY, SECTOR, AND SOURCE OF FINANCING

A. Project Success by Country

1. The Asian Development Bank (ADB) classifies developing member countries (DMCs) into four groups using two criteria: (i) per capita gross national product (GNP), and (ii) debt repayment capacity. Eligibility of a DMC to borrow Asian Development Fund (ADF) resources is related to the country classification: (i) Group A countries are eligible for ADF-only financing; (ii) Group B1 countries borrow primarily from ADF and limited amounts of ordinary capital resources (OCR); (iii) Group B2 countries borrow primarily from OCR with limited amounts from ADF; and (iv) Group C countries are eligible only for OCR financing. Graduated economies are no longer eligible for ADB support. Periodic reviews of the eligibility for, or graduation from ADF, normally coincide with the ADF replenishment exercise.

2. Although the graduation policy determines which countries have access to ADF resources, ADB recognizes that aid is most effective where policies and institutions are strong. ADB uses a performance-based allocation (PBA) system to allocate scarce ADF resources among eligible countries. The PBA allocation formula includes criteria related to the country's (i) policy and institutional performance rating, (ii) governance rating, (iii) portfolio rating, (iv) population, and (v) per capita income. This system of allocation was introduced in 2002 and refined in 2004. Therefore its impact is not yet reflected in Operations Evaluation Department (OED) project ratings, because the projects approved since 2002 are at an early stage of implementation.

3. Project success rates should improve for countries with higher GNP per capita, better governance, stronger institutions, more educated human resources, better performance on the Millennium Development Goals (MDGs), better infrastructure, a stronger formal private sector, an increased role of foreign trade and investment in the economy, and less dependence on agriculture. This suggests that the probability of project success should increase as a DMC's country classification progresses from being a Group A country to a graduating economy. Project success rates are summarized by country classification in Table A3.1 and detailed in Table A3.2.

Table A3.1: Project Success by Country Classification

Country Classification	Proportion of Projects Rated Successful			
	1970s	1980s	1990-1997	Total
Graduated Economies	85	90	none	86
C	66	55	77	65
B2	55	59	68	63
B1	40	60	71	60
A	58	50	74	61
Total	60	58	71	64

4. As one would expect, the probability of project success is highest in the graduated economies, which include Hong Kong, China; Republic of Korea; and Singapore. Ratings in this category are dominated by projects in the Republic of Korea (44 of the 57 successful projects). The average project success rate for graduated countries varied from 85% to 90% (see Table

A3.1). Over time, as good performing economies graduate, the overall performance of ADB's portfolio might be expected to decline.

Table A3.2: Project Performance by Country Classification and by Year of Approval

Country Group	Country	Number of Rated Projects by Year of Approval				Proportion of Projects Rated Successful (%)			
		1970s	1980s	1990s	Total	1970s	1980s	1990s	Total
Graduated Economies									
	Hong Kong, China	4	1		5	75.0	100.0		80.0
	Korea, Republic of	36	8		44	83.3	87.5		84.1
	Singapore	7	1		8	100.0	100.0		100.0
	Subtotal	**47**	**10**		**57**	**85.1**	**90.0**		**86.0**
Group C									
	Fiji Islands	4	5	1	10	100.0	40.0	100.0	70.0
	Kazakhstan			4	4			75.0	75.0
	Malaysia	23	21	7	51	56.5	61.9	85.7	62.7
	Philippines	33	29	26	88	51.5	37.9	57.7	48.9
	Thailand	24	14	19	57	87.5	85.7	100.0	91.2
	Subtotal	**84**	**69**	**57**	**210**	**65.5**	**55.1**	**77.2**	**65.2**
Group B2									
	China, People's Rep. of		6	51	57		66.7	82.4	80.7
	India		10	16	26		70.0	62.5	65.4
	Indonesia	39	53	57	149	59.0	60.4	63.2	61.1
	Papua new Guinea	8	12	9	29	37.5	41.7	22.2	34.5
	Uzbekistan			2	2			100.0	100.0
	Subtotal	**47**	**81**	**135**	**263**	**55.3**	**59.3**	**68.1**	**63.1**
Group B1									
	Bangladesh	21	29	32	82	23.8	65.5	84.4	62.2
	Cook Islands		2	6	8		0.0	66.7	50.0
	Marshall Islands			4	4			25.0	25.0
	Micronesia, Fed. States of			2	2			50.0	50.0
	Pakistan	25	52	30	107	56.0	59.6	56.7	57.9
	Sri Lanka	12	22	20	54	41.7	54.5	70.0	57.4
	Tonga	4	6	4	14	75.0	83.3	75.0	78.6
	Viet Nam	5		11	16	0.0		90.9	62.5
	Subtotal	**67**	**111**	**109**	**287**	**40.3**	**60.4**	**70.6**	**59.6**
Group A									
	Bhutan		4	3	7		50.0	100.0	71.4
	Cambodia			8	8			87.5	87.5
	Kyrgyz Republic			3	3			100.0	100.0
	Kiribati		2	1	3		50.0	0.0	33.3
	Lao People's Democratic Rep.	3	9	17	29	33.3	77.8	82.4	75.9
	Maldives		4	3	7		75.0	100.0	85.7
	Mongolia			9	9			77.8	77.8
	Myanmar	5	3		8	60.0	66.7		62.5
	Nepal	16	28	16	60	81.3	46.4	50.0	56.7
	Samoa	8	5	1	14	37.5	40.0	0.0	35.7
	Solomon Islands	4	3	2	9	25.0	0.0	100.0	33.3
	Vanuatu		4	2	6		25.0	50.0	33.3
	Subtotal	**36**	**62**	**65**	**163**	**58.3**	**50.0**	**73.8**	**61.3**
	Total	**281**	**333**	**366**	**980**	**60.1**	**58.0**	**71.3**	**63.6**

5. Group C countries (including Fiji, Kazakhstan, Malaysia, Philippines, and Thailand) generally borrow only OCR funds, although during times of difficulty the Philippines has been given access to ADF. Although less successful than graduated economies, these countries had the second highest success rating overall (65%) (see Table A3.2). Among this group, project success in the Philippines (49% overall and 58% for projects approved in the 1990s) is much lower than in any other Group C country. Problems with ADB's Philippine operations were

discussed in the Philippine country assistance program evaluation (CAPE)[1] (see Box A3.1) and more recently in the Philippine power sector assistance program evaluation (SAPE).[2] Excluding the Philippines,[3] the probability of success for Group C countries was 77%.

Box A3.1: Country Assistance Program Evaluation in the Philippines[1]

The Philippines CAPE focused on the period since 1986, which marked a watershed in the country's economic and political history. The CAPE found that the development impact of ADB's assistance program has been mixed and below that achieved by other DMCs. A matter of particular concern was the significant deterioration of project ratings over time. Project success was highest in the energy sector, followed by agriculture. The probabilities of project success in transport, social infrastructure, and finance were all below 50%. The principal reasons for the low success rate range from frequent internal and external shocks that the economy has experienced to more project-specific problems such as poor design and different types of implementation problems. The latter include excessive time needed, particularly for actions that require legislation; absorptive capacity constraints; complicated land acquisition and procurement policies and procedures; lack of counterpart funds; inadequate project personnel in both number and capability; and lack of institutional and financial capacity, especially of local government units, to undertake projects. These deficiencies resulted in implementation and operational problems across sectors. The Philippines CAPE identified a number of lessons: (i) political and macroeconomic stability is a critical factor behind the success of a development assistance program—projects were more successful when they were implemented in a stable environment; (ii) project success requires careful project preparation, including detailed analytical work and active participation of beneficiaries in design and implementation; (iii) project design should be relatively simple—complex project designs are likely to fail; (iv) sustaining development impacts requires close monitoring during implementation and after project completion; and (v) the success of the assistance program depends on its ability to nurture institutional development—weak institutions have often been cited as a principal cause of project failures in the Philippines. Since the completion of the Philippines CAPE, ADB and the government have taken action to clean up the portfolio and to address generic problems (e.g., streamline the procurement approval process, strengthen legal and financial support to EAs to address right-of-way and land acquisition problems, downscale and redesign projects, and cancel unutilized funds to ease counterpart fund problems). It remains to be seen whether these measures will lead to better development results as determined by project performance evaluation reports and project completion report ratings.

[1] ADB. 2003. *Country Assistance Program Evaluation in the Philippines.* Manila.

6. Current trends suggest that borrowing by countries like Malaysia and Thailand will be limited unless ADB can develop a broader range of products as part of the Middle Income Country Strategy that are attractive to such countries. If they borrow less from ADB, the positive contribution of their generally successful projects to the overall performance of the ADB portfolio will decline.

7. Group B2 includes three of ADB's largest clients (People's Republic of China [PRC], India, and Indonesia) and two smaller countries (Papua New Guinea [PNG] and Uzbekistan). Indonesia, PNG, and Uzbekistan have had limited access to ADF funds. PRC and India have not been given access to ADF funds. As in the Group C countries, there is one clear outlier in

[1] ADB. 2003. *Country Assistance Program Evaluation in the Philippines.* Manila.
[2] ADB. 2005. *Sector Assistance Program Evaluation of Asian Development Bank Assistance to Philippines Power Sector.* Manila.
[3] Of the 210 evaluated projects in Group C countries, 88 (42%) were in the Philippines. The high proportion of less than successful projects in the Philippines brought down the overall success rate of Group C.

the Group B2 countries: PNG has ADB's weakest performing portfolio. The overall project success rate for PNG is 35%, and for projects approved in the 1990s it was a very low 22%. PNG's development challenges were evaluated in the PNG CAPE (see Box A3.2). The PRC has one of ADB's best performing portfolios. The likelihood of successful project outcomes for India and Indonesia is close to the average for this group. Excluding the relatively small PNG portfolio, the success rate for Group B2 countries was 67%. The success rate for Group B2 countries for projects approved in the 1990s was the lowest among the country groups. This suggests that there is considerable scope for improving ADB's project results in these countries, other than the PRC.

Box A3.2: Country Assistance Program Evaluation for Papua New Guinea[1]

The PNG CAPE documented the country's development challenges (e.g., around 800 distinct tribal groups, complex governance structure, a small population dispersed over a large area with rugged terrain, limited communications, a dualistic economy that is dependent on international commodity prices). Over a 15 year period, ADB interventions provided advice for policy reforms; direct support to farmers; and assistance to improve support services (such as agricultural extension, finance, and skills development), infrastructure development (largely in the transport sector), health, and water supply. Projects were generally successful in producing anticipated outputs, although with delays and sometimes partial cancellations. However, due to the fragmented nature of interventions, only isolated outcomes were produced, and often they were not sustained, because funding for recurrent operations was not secured. No significant improvements to sector performance were attained. Contributions to the overall goal of promoting economic growth, particularly in rural areas, were overshadowed by external factors, poor economic performance, a deteriorating law and order situation, institutional weaknesses, and difficulties experienced with devolving powers from central to provincial governments and to district administrations. Interventions dealt with difficult questions related to finance, staffing, outreach to remote areas, and the cost of operating small systems. In terms of improving public service delivery across the board, assistance suffered from operating in isolation. While trying to tackle similar issues, solutions were not discussed across sectors, even when this was possible. The CAPE recommended that the government's and development partners' efforts need to concentrate on (i) determining and implementing a development agenda that addresses the need to create jobs to stem poverty; (ii) managing debt levels and introducing systemic changes to public resources management to avoid a financial crises; and (iii) building capacities through the public administration to manage the economy, ensure that the government and administration fulfill their roles, and provide public services where needed.

[1] ADB. 2003. *Country Assistance Program Evaluation for Papua New Guinea.* Manila.

8. The 2006 Uzbekistan CAPE assessed ADB's operations from 1996 to 2004.[4] As the portfolio is not mature, it is too soon to assess the program's impacts and sustainability. The CAPE evaluated the overall program as satisfactory based on relevance and efficacy. The projects in the education sector were impressive, and in both transport and agriculture the performance of projects was generally satisfactory. In contrast, ADB's operations in the financial sector, which were dominated by lines of credit through government-owned banks, experienced problems and performed poorly. The CAPE documented the importance of government ownership of policy and sectoral reforms and noted a need for greater focus and selectivity. Focusing on a limited number of sectors and aligning ADB resources accordingly may achieve better development results than superficial engagement in a large number of sectors. In the view of the evaluation team, keys to success include long-term involvement in a sector and for ADB to commit adequate expertise and resources.

[4] ADB. 2006. *Country Assistance Program Evaluation for Uzbekistan.* Manila.

9. The Indonesian CAPE, completed in 2005, rated the overall performance of the ADB strategy and program from 1990 to 2004 as *partly successful*.[5] The ADB program and strategy were rated as relevant, including during the Asian financial crisis and the period of instability that followed. ADB's country strategy and program were partly efficacious based on the results of completed and ongoing projects and contributions to some of the broader strategic objectives. Projects approved prior to the Asian financial crisis (52% of all projects) were rated as effective. However, the portfolio became weaker after the crisis, and the portfolio of ongoing projects was assessed as partly effective. Although there were differences by sector, overall the Indonesian portfolio was assessed as partly efficient. It was efficient before the crisis, but portfolio performance predictably weakened during and after the crisis and with the political transition and decentralization. The completed projects were efficient, bordering on partly efficient. Many ongoing projects encountered delays, underutilization, and administrative problems, especially due to difficulties related to decentralization, and were rated as partly efficient. Of the 49 completed projects whose sustainability was rated, 4 were rated as highly sustainable, 23 as likely sustainable, 21 as less likely, and 1 as unsustainable. Many of the completed physical and social infrastructure, urban development, and financial sector operations were successful, and their sustainability is likely. However, the sustainability of some community and rural development projects is doubtful. Work on the PRC and Indian CAPEs will begin in 2006. With their completion in 2007, a substantial body of evaluation evidence will be available on the performance of ADB's interventions in B2 countries.

10. Group B1 countries have access to ADF but also borrow limited amounts of OCR. The ratings in the eight Group B1 countries[6] are dominated by three South Asian countries. Together, Bangladesh, Pakistan, and Sri Lanka account for 243 (85%) of the 287 evaluated projects. Overall the probability of project success in Group B1 countries averaged 60%. However, the project success rate was very low for projects approved in the 1970s (40%). Project outcomes improved steadily in the 1980s and 1990s, reaching 71%. Project success rates improved over time in nearly all B1 countries. The one major exception was Pakistan. Only 57% of Pakistan projects approved in the 1990s were rated as successful, considerably below the success rates achieved during this decade in Viet Nam (91%), Bangladesh (84%), and Sri Lanka (70%). The Pakistan CAPE, to be completed in 2006, will provide deeper insights into the problems being experienced in ADB's Pakistan operations.

11. Group A countries borrow only ADF and do not generally have access to the international capital markets. Most of the 12 countries in this group have small portfolios.[7] Of the 163 evaluated projects in Group A countries, 55% are in two countries—Nepal (60) and Lao People's Democratic Republic (Lao PDR [29]). Most other Group A countries have fewer than 10 completed projects that were rated. The project success rate in Group A countries was 61%. Some countries performed well. These were largely the transition economies and Bhutan.[8] Some performed poorly,[9] including Nepal and some of the Pacific countries. In general, the project outcomes improved substantially in Group A countries in the 1990s, exceeding the average success rates for Group B1 and Group B2 countries. The one major exception was

[5] ADB. 2005. *Country Assistance Program Evaluation for Indonesia.* Manila.
[6] Bangladesh, Cook Islands, Marshall Islands, Federated States of Micronesia, Pakistan, Sri Lanka, Tonga, and Viet Nam.
[7] Bhutan, Cambodia, Kiribati, Kyrgyz Republic, Lao PDR, Maldives, Mongolia, Myanmar, Nepal, Samoa, Solomon Islands, and Vanuatu.
[8] The probability of project success exceeded the Group A average in Bhutan, Cambodia, Kyrgyz Republic, Lao PDR, Maldives, and Mongolia.
[9] The probability of project success was less than the Group A average in Kiribati, Myanmar, Nepal, Samoa, Solomon Islands, and Vanuatu.

Nepal. In contrast to the 81% success rate for Nepal projects approved in the 1970s, the corresponding success rate for the 1980s and 1990s was about 50%. The disappointing performance of ADB operations in Nepal is discussed in the Nepal CAPE[10] (see Box A3.3).

Box A3.3: Country Assistance Program Evaluation for Nepal[1]

The Nepal CAPE evaluated the effectiveness of ADB's assistance program during 1988–2003. Among other things, the CAPE analyzed the effectiveness of all 47 projects and program loans approved between 1 January 1988 and 31 December 2003. The CAPE concluded that, overall, most projects (i) were selected and designed within the priorities of the three strategies covering that period; (ii) had a positive development impact; and (iii) were or are being relatively successfully implemented, incorporating important crosscutting issues. Institutional and governance issues delay or impede implementation, but, with the exception of a few especially poorly prepared and implemented projects, most were at least partly successful and some were outstanding. Projects within the priority sectors identified generally had a higher degree of success than those in low-priority sectors. This may be partly due to the fact that ADB has more experience and a longer history in designing projects of this kind than projects in new sectors. In terms of the relative success of various sectors, water supply and sanitation projects and agriculture sector projects were the most effective in implementing efficiency, reaching the desired target group, and fostering social equity and economic growth. Within the agriculture sector, irrigation projects performed best, followed by agricultural credit projects. Transportation and education projects also performed well, but not as well as the agriculture, water, and sanitation projects. They seem to have been constrained by institutional problems and a lack of innovation in project design. The impact of energy projects on the country's overall economic growth was significant. In terms of ADB's role, earlier studies were rather critical of the degree of resources allocated to project preparation and supervision in the country and the caliber of work undertaken by ADB personnel. This latter point is also reflected in the stakeholder views expressed during the Participatory Stakeholders' Workshop. When project design included a mechanism for beneficiary participation, projects showed a high degree of success. The Nepal CAPE identified several lessons that relate to project success: (i) a clear and well-defined strategy is crucial; (ii) projects that actively consider the crosscutting priorities of ADB and the government in their design have a greater chance of success than projects that do not; (iii) a sound institutional base is generally required for effective projects; (iv) a project's success is most likely if the project design is based on a proven development model; and (v) the executing agency, the government, and ADB must show commitment to effective project implementation and ultimate project success for difficult and complex projects. The Nepal CAPE recommended that the next country strategy and program be clearly focused on sectors and investments that are already proven to be successful and that will, additionally, contribute directly to the improvement of incomes of socially and regionally disadvantaged groups. A stronger emphasis on road or rural infrastructure projects was recommended. The need for enhanced monitoring of ongoing and completed projects was also noted, as was the need for adequate financing for operation and maintenance to ensure project sustainability.

[1] ADB. 2004. *Country Assistance Program Evaluation for Nepal.* Manila.

12. The 2005 Bhutan CAPE[11] documents the generally successful performance of ADB's strategy and program from 1983 to 2003. The lending and nonlending programs were dominated by social infrastructure, energy, agriculture and natural resources, and finance. The lending program can generally be regarded as responsive/relevant to the government's development priorities during the period. One of the strengths of ADB's operations in Bhutan has been its consistency with the government's development strategy. This strengthened government ownership and contributed to generally good portfolio performance and to positive

[10] ADB. 2004. *Country Assistance Program Evaluation for Nepal.* Manila.
[11] ADB. 2005. *Country Assistance Program Evaluation for Bhutan.* Manila.

on-the-ground results. Another strength was the long-term sustainability of many of ADB's interventions. Since 1995, the performance of the Bhutan portfolio has been rated satisfactory. Performance was particularly good in the energy and social infrastructure sectors and slightly weaker, but still satisfactory, in the agriculture and transport sectors. Successful sector interventions were associated with recurrent and sustainable assistance, while those that performed poorly were associated with intermittent and sporadic interventions. This experience argues for focusing ADB interventions in a selected number of sectors over a long period of time, with ADB and the government agreeing on that involvement.

13. There is a modest correlation between a country's level of economic development and the performance of ADB operations, but the relationship is not stable. As is expected, the rate of successful projects is highest in the graduated economies and the Group C countries. However, the performance rankings for Groups A, B1, and B2 countries follow a different pattern. Sometimes Group A countries outperformed Groups B1 and B2 countries. Also, within the groups in some countries, the ratio of project success was substantially better than, or worse than, the group average. The relationship between the performance of ADB operations and a country is complex and depends on many factors.

B. Project Success by Sector and Source of Funding

14. Table A3.3 shows project performance by sector, further broken down by ADF or OCR funding.

Table A3.3: Project Performance by Sector and by Source of Funding

Sector/Subsector	Number of Rated Projects by Source of Funding and by Year of Approval												Proportion of Projects Rated Successful (%)											
	ADF				OCR				Total				ADF				OCR				Total			
	1970s	1980s	990–97	Total	1970s	1980s	990–97	Total	1970s	1980s	1990–97	Total	1970s	1980s	1990–97	Total	1970s	1980s	1990–97	Total	1970s	1980s	1990–97	Total
Agriculture																								
Fisheries	9	7	4	20	7	9	1	17	16	16	5	37	22.2	42.9	0.0	25.0	14.3	55.6	0.0	35.3	18.8	50.0	0.0	29.7
Industrial Crops and Agroindustry	7	7	2	16	2	6	4	12	9	13	6	28	28.6	14.3	50.0	25.0	100.0	16.7	50.0	41.7	44.4	15.4	50.0	32.1
Irrigation and Rural Development	18	35	27	80	16	17	7	40	34	52	34	120	38.9	62.9	66.7	58.8	50.0	41.2	71.4	50.0	44.1	55.8	67.6	55.8
Livestock	5	5	1	11	2	2		4	7	7	1	15	0.0	40.0	100.0	27.3	0.0	0.0		0.0	0.0	28.6	100.0	20.0
Forestry	3	7	6	16		5	2	7	3	12	8	23	66.7	57.1	16.7	43.8		40.0	0.0	28.6	66.7	50.0	12.5	39.1
Agricultural Support Services	9	14	12	35		6	8	14	9	20	20	49	44.4	50.0	50.0	48.6		33.3	62.5	50.0	44.4	45.0	55.0	49.0
Fertilizer Production	5	1		6			1	1	5	1	1	7	60.0	100.0		66.7			0.0	0.0	60.0	100.0	0.0	57.1
Subtotal	**56**	**76**	**52**	**184**	**27**	**45**	**23**	**95**	**83**	**121**	**75**	**279**	**35.7**	**52.6**	**51.9**	**47.3**	**40.7**	**37.8**	**52.2**	**42.1**	**37.3**	**47.1**	**52.0**	**45.5**
Energy																								
Electric Power	24	20	21	65	26	22	26	74	50	42	47	139	66.7	80.0	85.7	76.9	88.5	72.7	88.5	83.8	78.0	76.2	87.2	80.6
Natural Gas	1	4	2	7	1	7	9	17	2	11	11	24	100.0	100.0	100.0	100.0	100.0	85.7	88.9	88.2	100.0	90.9	90.9	91.7
Refinery						1		1	0	1	0	1						100.0		100.0		100.0		100.0
Fuel Materials		1		1	3			3	3	1	0	4		0.0		0.0	66.7			66.7	66.7	0.0		50.0
Others							2	2	0	0	2	2							50.0	50.0			50.0	50.0
Subtotal	**25**	**25**	**23**	**73**	**30**	**30**	**37**	**97**	**55**	**55**	**60**	**170**	**68.0**	**80.0**	**87.0**	**78.1**	**86.7**	**76.7**	**86.5**	**83.5**	**78.2**	**78.2**	**86.7**	**81.2**
Finance																								
Development Finance Institution	14	16	8	38	24	11	7	42	38	27	15	80	0.0	31.3	62.5	26.3	66.7	81.8	28.6	64.3	42.1	51.9	46.7	46.3
Industry																								
Industry (Non-Agriculture)	3		2	5	7	2	6	15	10	2	8	20	66.7		50.0	60.0	71.4	100.0	50.0	66.7	70.0	100.0	50.0	65.0
Nonfuel Materials		1		1	2	2		4	2	3	0	5		100.0		100.0	100.0	100.0		100.0	100.0	100.0		100.0
Subtotal	**3**	**1**	**2**	**6**	**9**	**4**	**6**	**19**	**12**	**5**	**8**	**25**	**66.7**	**100.0**	**50.0**	**66.7**	**77.8**	**100.0**	**50.0**	**73.7**	**75.0**	**100.0**	**50.0**	**72.0**
Multisector/Others																								
Multisector	1	11	16	28			9	9	1	11	25	37	100.0	63.6	81.3	75.0			44.4	44.4	100.0	63.6	68.0	67.6
Others			3	3			2	2	0	0	5	5			33.3	33.3			50.0	50.0			40.0	40.0
Subtotal	**1**	**11**	**19**	**31**			**11**	**11**	**1**	**11**	**30**	**42**	**100.0**	**63.6**	**73.7**	**71.0**			**45.5**	**45.5**	**100.0**	**63.6**	**63.3**	**64.3**
Social Infrastructure																								
Water Supply and Sanitation	7	7	16	30	19	11	12	42	26	18	28	72	14.3	42.9	68.8	50.0	73.7	36.4	75.0	64.3	57.7	38.9	71.4	58.3
Education	9	13	30	52	2	8	12	22	11	21	42	74	77.8	30.8	70.0	61.5	50.0	87.5	91.7	86.4	72.7	52.4	76.2	68.9
Urban Development and Housing		5	9	14	4	10	7	21	4	15	16	35		20.0	77.8	57.1	75.0	80.0	85.7	81.0	75.0	60.0	81.3	71.4
Health and Population		7	12	19	2	6	2	10	2	13	14	29		28.6	50.0	42.1	100.0	50.0	50.0	60.0	100.0	38.5	50.0	48.3
Subtotal	**16**	**32**	**67**	**115**	**27**	**35**	**33**	**95**	**43**	**67**	**100**	**210**	**50.0**	**31.3**	**67.2**	**54.8**	**74.1**	**62.9**	**81.8**	**72.6**	**65.1**	**47.8**	**72.0**	**62.9**
Transport and Communications																								
Roads and Road Transport	3	15	19	37	19	11	27	57	22	26	46	94	66.7	80.0	94.7	86.5	94.7	90.9	88.9	91.2	90.9	84.6	91.3	89.4
Ports and Shipping	5	5	3	13	13	7	7	27	18	12	10	40	80.0	60.0	100.0	76.9	76.9	71.4	85.7	77.8	77.8	66.7	90.0	77.5
Airports and Civil Aviation	2		5	7	2		2	4	4	0	7	11	100.0		60.0	71.4	100.0		50.0	75.0	100.0		57.1	72.7
Railways	1	1	1	3	1	2	4	7	2	3	5	10	0.0	0.0	100.0	33.3	0.0	50.0	50.0	42.9	0.0	33.3	60.0	40.0
Telecommunications	3	1	3	7		5	7	12	3	6	10	19	100.0	100.0	100.0	100.0		60.0	100.0	83.3	100.0	66.7	100.0	89.5
Subtotal	**14**	**22**	**31**	**67**	**35**	**25**	**47**	**107**	**49**	**47**	**78**	**174**	**78.6**	**72.7**	**90.3**	**82.1**	**85.7**	**76.0**	**85.1**	**83.2**	**83.7**	**74.5**	**87.2**	**82.8**
Total	**129**	**183**	**202**	**514**	**152**	**150**	**164**	**466**	**281**	**333**	**366**	**980**	**45.7**	**54.1**	**69.3**	**58.0**	**72.4**	**62.7**	**73.8**	**69.7**	**60.1**	**58.0**	**71.3**	**63.6**

ADF = Asian Development Fund, OCR = Ordinary Capital Resources.

LEARNING FROM SUCCESSFUL ROAD PROJECTS

A. Characteristics of Successful Road Projects

1. There were 94 road projects approved, completed, and rated by the end of 1997. Of these, 89% were rated as successful or highly successful by project performance evaluation reports (PPERs) and project completion reports (PCRs). Only 10 road projects were rated as partly successful or unsuccessful. For these completed projects, the Asian Development Bank (ADB) road lending focused mainly on financing traditional investment projects. Sectorwide issues, policy reform, and institutional issues featured less prominently in project design than is currently the case. Most of these projects were approved before ADB adopted its environmental and social safeguard policies.

2. A basic requirement for a successful road project is that it should attract sufficient traffic so that project benefits will exceed project costs. All of the successful road projects examined attracted traffic levels in line with their designed capacity. In most cases traffic exceeded the appraisal forecasts as a result of rapid growth in vehicle ownership and use. This was a characteristic of successful projects, whether they were in countries that experienced high and sustained economic growth, such as the People's Republic of China (PRC) and Thailand, or in others that had more moderate growth, such as Nepal and Sri Lanka. For some tolled expressway projects in the PRC, traffic was initially less than forecast but later increased.

3. All successful road projects lowered vehicle operating costs and reduced journey times. This contributed to improved economic efficiency. The savings in operating costs and time contributed to economic internal rates of return (EIRRs) that were mostly well above the 12% hurdle rate. Rehabilitation projects had especially high EIRRs—sometimes over 100%—although this was sometimes because previous investments had not been properly maintained and had, therefore, not realized their potential economic returns.

4. Improved roads led to increases in the availability of privately operated passenger bus services and trucking operations in the project areas. This was most marked for rural roads, where road improvement sometimes resulted in the introduction of reliable transport services for the first time. Expressways also generated transport service improvements, but these were more incremental in nature. In most successful projects at least part of the benefits of lower transport costs were passed on from operators to users in the form of lower unit charges. This varied depending on the extent of competition among transport service operators. The benefits of shorter journey times automatically went to users.

5. Successful rural roads projects had a major impact on communities served by contributing to increased incomes and employment, and improved social services. Better access to markets and to administrative and service centers led to changes in economic activities and in the way of life, and was a significant factor in poverty reduction. People were able to switch from subsistence farming to producing higher value agricultural products, and to develop small-scale manufacturing and service enterprises, and there was growth in wage labor opportunities. Another dimension of impacts was through improved delivery of social services; but this depended on the extent of other complementary programs such as health services and education. In some cases more could have been done to coordinate with these programs or to incorporate complementary components within ADB road projects.

6. The impacts of national highways projects tended to be more diffuse. The main impact channel was through the contribution of transport cost and time savings to economic growth,

leading to indirect impacts on poverty reduction through rising incomes, employment, and increased government revenues available to finance public programs.

7. Most successful projects used existing alignments that avoided significant environmental impacts and limited the extent of land acquisition and resettlement. The main adverse impacts were through increased road accidents arising from higher vehicle speeds. Developing member countries (DMCs) were especially vulnerable to these impacts, because their road safety programs were still weak. Only toward the end of the sample period did ADB begin to incorporate road safety within its support for the road sector.

8. Sustained ADB involvement in the road sector contributed to successful project outcomes. Successful projects tended to adopt a limited and incremental approach to institutional strengthening and sector reform. Reform initiatives, such as restructuring of road sector institutions or strengthening of road financing mechanisms, were often pursued through a dialogue spanning several lending and technical assistance (TA) operations sometimes covering a decade. This required a consistent agenda to be followed, with a measure of flexibility to adapt to changes in circumstances along the way.

9. Successful projects generally benefited from the lessons learned from ADB's first road sector intervention in the country concerned. First loans have tended to involve a lot of learning that, while sometimes problematic in the short term, contributed to the success of later loans.

B. Quality at Entry

10. The quality at entry of successful projects was generally satisfactory. Dimensions of quality included the quality of the project preparatory technical assistance (PPTA), the project design, incorporation of lessons, and extent of government ownership.

11. Most successful projects were preceded by PPTA. In general there was a linkage between good PPTA performance and eventual project success. PPTA was essential in countries where the capacity of road sector institutions was weak. In some countries where the capacity of road sector institutions was relatively strong, such as the PRC, PPTA was less essential. In some cases, PPTA was not required, as the executing agency (EA) had already prepared most aspects of the project to satisfactory standards.

12. Careful selection of road sections for improvement was a common feature of successful projects. When ADB supported parts of a major highway investment plan that featured prominently in the DMC's medium-term investment plan, this usually meant that the investments were well selected and carefully prepared. It also helped to build in national ownership. In many cases ADB financed successive investments within the same plan, in some cases continuing with new projects for more than a decade.

13. Continuity of ADB involvement in the sector, and by individual ADB professional staff, was an important determinant of quality at entry. In PRC, Indonesia, and Thailand, ADB financed a succession of highway loans that contributed to the development of national highway networks. Over time, ADB developed considerable familiarity with the design and implementation factors that affected project success in the respective countries. This meant that ADB was able to incorporate a wealth of experience that ensured high quality of project formulation. It also meant that EAs gradually built up their capacity and familiarity with ADB procedures. In Indonesia and Thailand, this led to a fairly natural progression from project to sector lending, which helped to scale up ADB support and reduce transaction costs.

14. Successful projects often packaged civil works in ways that contributed to building sector capacity. For simple road improvements, local competitive bidding was commonly used to encourage fledgling domestic private contracting industries. International competitive bidding was adopted as a means of promoting competition in civil works, and, when civil works were complex, requiring more sophisticated expertise and greater financial capacity on the part of contractors.

15. The government's share of project financing varied widely over the sample—from a minimum of 9% to a maximum of 80%. This was not correlated with project success or with the extent of government ownership.

16. A feature of some successful expressway projects in the PRC—which was introduced at the end of the sample period—was the inclusion of a feeder roads component to try to increase the poverty reduction impact in the hinterland of the expressway.

C. Quality During Implementation

17. As is to be expected, even successful projects encountered problems of some kind during implementation. These included technical and design-related problems (e.g., unforeseen site conditions, revised traffic expectations, observed weaknesses in design); difficulties with consultant recruitment and with civil works or equipment procurement; weaknesses in the performance of consultants or contractors; shortcomings on the part of the EA; and changes in policies, priorities, and institutional responsibilities.

18. A feature of successful projects was the ability to cope with such problems, find solutions, and adapt to unforeseen circumstances. This drew variously upon the initiative of EAs, the performance of consultants, and the contribution of ADB toward problem solving. ADB's role often involved fielding special project administration missions and performing a midterm review. When ADB project officers had good familiarity with the country, technical skills related to the sector, and a close working relationship with EA officials, it was easier for them to help the EA and the consultants to find solutions, and to make sure these were compliant with ADB procedures.

19. There was no clear link between timeliness of implementation and project performance. Some successful projects were completed on time, but most took 2-4 years longer than scheduled, sometimes even more. Successful projects generally did not have significant cost overruns. In most cases the project cost was within the appraisal estimate. If there was an overrun, it was usually less than 10%.

20. Project success depended on supervision consultants and contractors performing satisfactorily. The consultants played an important role in ensuring contractor performance, and in supporting the project implementation unit of the EA. A common but usually minor problem with consultants was the need for staff replacements—some at the request of the consultant and some requested by the EA. This caused short-term disruptions in consultant capacity.

D. Performance of Executing Agency

21. The performance of EAs was generally satisfactory. Where EA capacity was limited, the implementation arrangements usually included provisions for additional support from the supervision consultants. Successful EAs often had a track record of having previously handled

similar projects. However, EAs were sometimes weak or slow in decision making and in taking action—especially on consultant recruitment and civil works procurement—and this contributed to the overall delays in project implementation.

E. ADB's Contribution to Project Success

22. Regular supervision missions were a consistent feature of successful projects. On average these were fielded twice a year, with greatest frequency of missions during the first 2-3 years after loan approval—which is when most problems arise and when ADB missions can be of most help. The duration and composition of ADB missions generally ensured that enough of the required mix of professional expertise was provided to monitor implementation and assist in problem solving. On average, each mission had 13 person-days of staff inputs.

23. Most of the sample of successful projects preceded the shift toward greater delegation of project administration to resident missions, and were supervised from ADB headquarters. In DMCs where ADB had large resident missions, some supervision responsibilities were delegated by the mid-1990s. In the projects, however, most supervision continued to be the responsibility of headquarters staff.

24. . Continuity helped to ensure that ADB learned from successive projects and that policy dialogue on the main sector and institutional reform issues was maintained over a sufficiently long period to produce results. Continuity of ADB's engagement in a country's road sector and of ADB staff involvement had a significant positive influence on ADB's contribution to success. Continuity also helped ADB staff to establish close working relationships with their government counterparts and to become trusted sources of support and advice.

F. Exogenous Factors

25. In some countries rapid and sustained economic growth played a major part in the success of ADB highway projects and was a leading factor in determining the volume and pace of road sector investment that ADB could support. Economic growth generated a rapid expansion in the demand for transport and in vehicle ownership, and provided the additional government revenues needed for investing in the road network and building the capacity of road sector institutions.

26. Successful highway projects coped with a variety of exogenous factors, including government reorganizations, restructuring of EAs, decentralization of authority from national to local government institutions, and the impacts of the Asian financial crisis on traffic growth and project implementation activities.

G. Cross-cutting Themes

27. Several weaknesses in sector governance were evident, even in the successful projects. These concerned sector level implementation of policies and plans to improve the planning, execution, and financing of road maintenance and to prevent damage through vehicle overloading. The greatest uncertainty associated with successful projects was over future maintenance. Some measure of uncertainty was common to nearly all the sample projects. This particularly concerned the level of future maintenance financing and, in some cases, also the standard of maintenance planning and execution. Many projects had included components, TA, or loan covenants intended to strengthen road maintenance, but these were seldom pursued with vigor during project implementation. Sometimes PPERs and PCRs reported recent trends

of improvement, but there was usually a good deal of uncertainty over whether this would be sustained in the future.

28. A related issue is that few projects addressed the problem of truck overloading, which causes premature deterioration in the road condition in many DMCs. Even when the issue was addressed by a project component, it was not pursued vigorously and usually did not lead to a significant reduction in overloading.

29. Comparatively few road projects approved before the mid-1990s included components to improve road safety, although this has since become a more common feature of ADB operations in the sector. PPERs and PCRs frequently found that road accidents had increased due to increased driving speeds. A related issue was the lack of a road safety audit during design of road improvements. Road designs often failed to relocate roads that passed through populated centers.

H. Counterfactual in the Road Sector

30. To better understand the characteristics of successful road projects, their characteristics were compared with road projects that were rated as partly successful (see Table A4). While highly successful road projects tended to be larger, the sizes of successful and partly successful road projects were about the same. The delay in implementation of successful road projects was 1–1.5 years. The delay was longer (3.2 years) for partly successful projects. There were sometimes extended delays arising from procurement problems and poor performance of contractors. One of the causes of implementation problems was that EAs lacked capacity and often had little or no previous experience with ADB procedures. In some cases EAs had staff shortages and high staff turnover, sometimes linked to overall fiscal problems.

31. Over the period studied in detail, five road projects were rated as partly successful or unsuccessful by PPERs—two in the Philippines; and one each in Bangladesh, Papua New Guinea (PNG), and Sri Lanka. Differences were examined between these projects and the successful and highly successful projects to better understand the factors that contribute to successful road projects.

32. Adverse exogenous factors were often associated with lack of success. In PNG and Philippines, overall macroeconomic problems reduced the demand for transport, and fiscal problems limited the financing available for road maintenance. In Philippines (Mindanao) and Sri Lanka, security problems added to the difficulties experienced during implementation and to the cost of construction.

33. It was a common feature of the partly successful road projects that traffic was significantly less than forecast. Sometimes this was attributed to exogenous factors and sometimes it was because of shortcomings in project preparation. Partly successful road projects generally suffered from weaknesses in the quality of project preparation. In addition to overoptimistic demand forecasts, there were cases of substandard designs that necessitated design changes during implementation, and of the scale of facilities being more than necessary. There were cases of both investment and sector reform components being poorly defined, and this led to lower priority investments being financed and reform activities being ineffective.

34. Sometimes an unsuited lending modality was followed. In one case a program loan was used when a project loan would have been more appropriate. In another case, sector lending was used, but the EA and supervision consultants were not sufficiently experienced to take on

the extra responsibilities associated with this modality. The range of ADB's financial products is expanding under the Innovation and Efficiency Initiative. This finding suggests that it will be increasingly important for mission leaders and team members to be fully conversant with the range of ADB's financial products and loan terms to structure financial products that are appropriate for the situation and meet the needs of the clients.

35. In all cases project sustainability for the partly successful projects was rated less likely or unlikely. This was due to inadequate road maintenance. Project support for institutional strengthening and sector reform failed to overcome weaknesses in the approach to planning, execution, and financing of maintenance. In some cases changes in institutional responsibilities contributed to the neglect of maintenance.

I. Summary

36. Box A4 summarizes the characteristics of successful road projects.

Box A4: Characteristics of Successful Road Projects

1. Adequate levels of traffic used the completed roads; traffic growth is associated with economic growth.
2. Vehicle operating and journey times were reduced and transport services improved.
3. Continuity of ADB's engagement in a country's road sector and of ADB staff involvement had a positive influence on ADB's contribution to project success. Reform initiatives were often pursued through a dialogue spanning several lending and TA operations, sometimes covering a decade.
4. Good quality at entry covered the quality of the PPTA, the project design, and the incorporation of lessons learned from previous projects.
5. Strong government ownership was evident when ADB supported parts of a major highway investment plan that featured prominently in the DMC's medium-term investment plan.
6. EAs performed well, were sometimes supported by supervision consultants, and often had a track record of having previously handled similar projects.
7. EAs, consultants, contractors, and ADB staff worked together to solve problems and handle unforeseen circumstances that developed during implementation.
8. Supervision consultants and contractors performed satisfactorily.
9. Regular ADB supervision missions were a consistent feature of successful projects, particularly during the first 2-3 years after loan approval, when most problems arise and ADB missions can be of most help.
10. Adequate maintenance is essential for project success and sustainability.

Source: OED

Table A4: Characteristics of Successful Road Projects

Item	Highly Successful		Generally Successful or Successful		Partly Successful[a]		Total	
	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average
Project Characteristics								
Size of Project ($ million)	11	373.4	35	184.3	4	198.2	50	227.0
Economic Internal Rate of Return at Appraisal (%)	11	22.2	31	21.2	3	27.7	45	21.9
Economic Internal Rate of Return at Postevaluation (%)	4	20.6	7	25.5			11	23.7
Planned Implementation Period (years)	11	4.0	35	3.9	4	4.7	50	4.0
Actual Implementation Period (years)	11	5.2	35	5.3	4	7.8	50	5.5
Implementation Delay (years)	11	1.2	35	1.5	4	3.2	50	1.5
Cost Deviation (%)	11	(3.7)	35	(6.9)	4	(20.9)	50	(7.3)
Cost Overrun (%)	5	15.8	14	10.2	2	13.7	21	11.9
Cost Underrun (%)	6	(20.0)	21	(18.4)	2	(55.5)	29	(21.3)
ADB Inputs								
Project Processing Missions	11	2.3	35	1.9	4	2.0	50	2.0
Project Processing Person-Days	11	45.5	35	49.7	4	51.8	50	49.0
Project Administration Missions during Implementation	11	7.8	34	8.2	4	14.0	49	8.6
Project Administration Missions per Year of Implementation	11	1.5	34	1.6	4	1.8	49	1.6
Project Administration Person-Days during Implementation	11	72.2	34	98.0	4	239.0	49	103.7
Project Administration Person-Days per Year of Implementation	11	14.1	34	19.1	4	29.7	49	18.8

[a] No road project approved during the 1990s was rated as unsuccessful.

ADB = Asian Development Bank.

Notes:

"Average" refers to simple mean (i.e., unweighted).

Project size refers to the actual cost of the project, which includes funding from ADB, the government, and other sources.

Implementation period refers to the length of time taken to implement a project (from original date of effectiveness to completion).

Implementation delay is the difference between planned and actual implementation period.

Processing missions comprise fact-finding and appraisal missions.

Administration missions are supervision missions carried out from inception to project completion, excluding PCR missions.

Sources: Project completion reports and project performance evaluation reports of approved road projects since 1990 containing a rating circulated as of 31 December 2005.

LEARNING FROM SUCCESSFUL POWER PROJECTS

A. Characteristics of Successful Power Projects

1. Forty-one Asian Development Bank (ADB) power projects were approved from 1990 to 1996 that have been completed and rated as successful. These covered rural electrification, transmission and distribution lines, hydro and thermal generation, and energy efficiency improvement. The successful outcomes of these projects appear to result from (i) ADB's careful assessment of the capabilities of the executing agency (EA), and (ii) a flexible approach to project design and implementation. Because power infrastructure has a long-term impact on an economy, and often represents a major investment, ADB's long-term commitment to working in partnership with governments is a key to success.

2. In the successful projects reviewed, there were deficiencies in the supply of energy to consumers, partly resulting from the increasing demand related to rapid economic growth. Therefore demand was not a problem, and benefits were immediate once the projects were completed (People's Republic of China [PRC], Indonesia, Maldives). Evaluations found that increased electricity supply contributed to accelerated economic growth; better quality of life (PRC, Lao People's Democratic Republic [Lao PDR], Maldives, Nepal); increased employment; and, on occasion, increased trade—all of which, in turn, contribute to poverty reduction. For example, in the Lao PDR, the electricity produced by the Theun-Hinboun project became the country's largest export and source of foreign currency.

3. A socioeconomic survey was undertaken for the Philippines Power Sector Assistance Program Evaluation (SAPE)[1] on the impact of electrification on rural (and some urban) users in villages across Luzon, Visayas, and Mindanao (see Box A5.1). It found that electricity contributes to (i) income generation, (ii) information dissemination, (iii) reduced birth rates, (iv) longer study time for children, (v) access to entertainment, and (vi) improved quality of life in general. An ADB survey of 716 business establishments in the Philippines found that about 33% of the firms viewed electricity supply as a major or severe constraint, behind macroeconomic stability (40%) and corruption (34%). Specifically, the survey indicated that the high cost and potential shortage of electric power, as well as poor transportation infrastructure, were the principal infrastructure concerns of investors. Business losses from power failures amounted, on average, to 8% of production. Power outages cost small and medium firms the equivalent of about 8% and 11% of production, respectively, compared with 6% for larger firms. The importance that businesses attach to a reliable supply of electricity and stable voltage was also confirmed during interviews with businesses conducted by the Operations Evaluation Department (OED) for this evaluation.

4. A survey of electricity customers was also undertaken for the Bangladesh Power SAPE.[2] This evaluation found that the modest improvement in the sector's financial and operational performance was not translated into greater customer satisfaction among urban residential, commercial, and industrial consumers. Interviews with selected industrial and commercial customers found that most users were not satisfied with the quality of the supply. Most industrial consumers had their own captive power generation to deal with the unreliable supply. The main issues facing rural customers or would-be customers were low connection rates, which rose

[1] ADB. 2005. *Sector Assistance Program Evaluation of Asian Development Bank Assistance to Philippines Power Sector*. Manila.

[2] ADB. 2003. *Sector Assistance Program Evaluation of Asian Development Bank Assistance to Bangladesh Power Sector*. Manila.

from 1% in the early 1970s to about 30%; and poor quality of supply. The socioeconomic survey conducted as part of the evaluation found that the availability of electricity was positively correlated with a wide range of economic and social indicators, including higher participation rates by women in income generation, better nutrition, higher wages for the landless, and more studying and working time during evenings. However, the survey did not find statistically significant evidence that rural households with electricity had higher incomes than those without electricity, as suggested by an earlier survey. This may reflect other factors at work in the different geographic areas covered (e.g., activities of nongovernment organizations [NGOs], distance to a national road or urban area, population mobility).

Box A5.1: Philippines Power Sector Assistance Program Evaluation[1]

The Philippine Power SAPE assessed ADB's assistance over the last 34 years. ADB has been the lead development partner in the sector, providing support for the ongoing sector restructuring and reforms. The goals of the assistance program evolved over time. Between 1971 and the late 1980s, ADB focused on (i) developing indigenous energy and energy infrastructure to reduce reliance on imported fuel, and (ii) providing reliable and affordable electricity. After the power crisis in the late 1980s and the early 1990s, ADB added a third goal—establishing a financially viable power sector.

ADB-supported projects mostly achieved their expected outputs, with satisfactory to good quality, though often with delays in implementation; scope reductions; or, in some cases, cost overruns. At the project level, 87% of the ADB-supported energy projects in the Philippines were rated successful. At the sector level, the first objective (i.e., development of indigenous energy and energy infrastructure to reduce reliance on imported fuel) was mostly achieved, particularly with a series of hydropower projects in Mindanao funded in the 1970s. However, the program as a whole did not achieve the second and third objectives (i.e., providing reliable and affordable electricity, and developing a financially viable power sector). The power sector assistance program from 1971 to the late 1980s is rated successful, and the program from the late 1980s to the present is assessed as partly successful. Overall the program is assessed as partly successful.

The power sector faces major challenges, including (i) risks posed by power sector reforms; (ii) high tariffs, and the need for additional increases; (iii) corruption; (iv) sector debt financing, and implications for the national fiscal balance; (v) the possibility of another power crisis; and (vi) the role of retailing in the restructured sector. Lessons drawn from the evaluation include the following: (i) power sector problems cannot be resolved unless regulators become more independent; (ii) demand forecasts need to be more realistic; (iii) ADB needs to strengthen the quality of its financial review of the sector's performance; (iv) ADB should have actively promoted the use of internationally accepted and transparent procedures for evaluating independent power producer bids; (v) delays in project implementation must be reduced; (vi) project costs should be controlled by improving governance and reducing corruption; (vii) currency mismatches should be avoided; and (viii) greater ownership by EAs is needed for policy-related advisory TAs to be successful.

[1] ADB. 2005. *Sector Assistance Program Evaluation of Asian Development Bank Assistance to Philippines Power Sector.* Manila.

5. Success in the power sector requires plant and equipment to be fully utilized, and operated and maintained correctly. Technical success often involved improvements in the reliability of energy distribution and reduced losses in transmission (Indonesia, Philippines, Thailand).

6. The successful ADB-supported power projects had an impact on the management capabilities of the EAs as well, through the increased use of competitive procurement; reduced

technical losses; increased billing and collection; better management through more and timely information; and better systems, planning, and financial operations.

7. The main factors contributing to the sustainability of power projects are (i) continued relevance over their long lifespan; (ii) high standards of operation and maintenance (O&M), which require well qualified staff; and (iii) sufficient revenues to fund O&M activities that are actually spent for those activities. PRC, Indonesia, and Thailand, for instance, have tariffs that approximate the cost of supply, so their utilities are largely self-funding. In all three countries, technical skills and institutional cultures have succeeded in maintaining a high level of operational performance. Another example of success is provided by rural electrification in Bangladesh. In contrast with many of the larger utilities in the country, the rural electrification authority is self-sustainable, mainly because the EA has been given autonomy and can operate largely without political interference.

B. Quality at Entry

8. Successful projects achieved a good fit between project design and the capabilities of the EA. Two important aspects of such capability are previous experience with ADB's loan requirements and the existence of qualified project management teams.

9. Successful project designs have often benefited from evaluation findings from earlier projects in the same sector. There were weaknesses in the design of the Nam Theun 1 Project like the absence of a good environmental impact assessment, the absence of baseline studies, and a lack of capacity in the environmental monitoring unit. Based on lessons learned from past projects, both the Theun Hinboun (Nam Theun 1) and Nam Theun 2 projects allocated funds for environmental and social mitigation measures as a line item separate from the construction budget. Improving on the design of the Theun Hinboun Project, the Nam Theun 2 Project went further, making great efforts to consult with affected parties, carry out systematic baseline studies, and support the capacity of the units responsible for monitoring and for environmental and social mitigation efforts. The early funding of a panel of experts also contributed to better environmental and social mitigation efforts.

10. A consultative approach seems to contribute to success. It improves commitment and helps match implementation designs with capabilities. In successful projects, where the initial knowledge and experience of the EAs were limited, the project designs were more extensive and drew on project preparatory technical assistance (PPTA) or concurrent advisory technical assistance (ADTA) designed to overcome these institutional limitations. In some cases, turnkey project designs (Maldives, Sri Lanka) were used to overcome a lack of experience of the EA.

C. Quality During Implementation

11. During implementation, the key success factors were the commitment, quality, and experience of the project management team in the EA. Continuity of the EA's staff and the consultants employed to assist with implementation was generally important. The continued presence of the design consultants tended to improve the quality of implementation. PRC and Philippines generation projects used the same consultants for design and project implementation, whereas other projects benefited from an experienced EA that had been strengthened under previous ADB projects (Thailand).

12. Most successful projects did not require major design changes during implementation. Nevertheless several encountered problems with technical design, contract staff capabilities, or

procurement. This tested the capabilities of the EA and ADB. In the successful projects, early recognition of these problems, together with a flexible approach by ADB and the EA, proved successful in making the required technical design changes and resolving contract issues. For instance, the rural electrification project in Bhutan required changes in design and in its implementation due to unforeseen terrain difficulties. Another example was the lack of environmental monitoring in the early design of the Theun-Hinboun Project in the Lao PDR. In both cases, the EA was committed to achieving a good outcome, and ADB was flexible in its approach to help overcome the problems.

13. The quality of EA staff and their experience were varied. Familiarity with ADB's procurement procedures takes time to acquire. Sometimes employment of a procurement specialist was necessary to ensure compliance with ADB requirements. The successful projects generally achieved a good standard of competitive bidding processes, and the EA had, or developed, professional procurement skills. With better qualified staff, there were fewer implementation problems. However, in some cases an unthinking acceptance of the lowest priced bids required intervention by ADB. There was less delay when EAs had gained experience with ADB procedures in the past.

14. Successful projects had adequate access to counterpart funds. For example, in the case of Thailand, which experienced a large devaluation of its currency, the EA was able to manage this situation by mobilizing more local funds.

D. Performance of the Executing Agency

15. The performance of the EAs was almost always a key factor in successful projects. If the EA is highly motivated, skilled, and well funded, the prospects for success are good. EA performance benefits from strong political support (Malaysia, Thailand, Viet Nam) and from cost recovery by user fees.

16. Successful projects generally also contribute to strengthening institutions. Concurrent delivery of PPTAs and ADTAs enhanced the learning experience. Examples include the development of environmental evaluation and monitoring (PRC, Lao PDR, and Thailand) and the development of a Social Engineering Department in the Philippines. Successful projects led to better accounting, computer, and managerial skills in Cambodia and PRC, and improved regulatory regimes (Cambodia and Indonesia).

E. ADB Contribution to Project Success

17. In some cases ADB contributed to successful project outcomes. Its project administration missions provided a regular review of progress. Examples of ADB value added included encouraging private sector participation, developing environmental evaluation, mitigation and monitoring schemes (Lao PDR); acting as a mediator in resolving conflicts with contractors and consultants (Nepal); helping to manage cost variations (PRC, Thailand); assisting with bid approval and awards; and providing advice on technical issues. In successful projects TA support was generally felt to be successful by the EAs.

18. Delays in project implementation are common, even in successful projects. These can potentially have serious detrimental effects, including additional interest costs during construction and persistent shortages in the supply of energy. The longest delays observed occurred in the transmission and distribution projects and were often associated with external factors (weather or terrain) and internal organizational factors such as procurement procedures.

In successful power projects, ADB contributed to reducing these delays and to efficient processing of loan extensions when they were necessary. These steps helped to ensure that delays did not jeopardize successful project outcomes.

F. Exogenous Factors

19. Up to 1997, the rapid economic growth in the Asia and Pacific Region and the consequent high level of unmet demand for energy created conditions that contributed to the success of power projects. In the aftermath of the Asian financial crisis, many loans were partly cancelled. The devaluation of the Indonesian rupiah, Philippine peso, and Thai baht resulted in a reduction in the scope of some projects and in some oversupply of power infrastructure, particularly generation capacity. However, demand recovered and has outstripped supply again in most countries. ADB encouraged unbundling in the energy sector and this has, in some cases, resulted in better and more transparent governance, with subsequent technical and financial improvements. In some countries evaluations have concluded that reform of the power sector is a difficult, longer term process that has not always delivered the anticipated benefits.

G. Cross-Cutting Themes

20. Providing people with access to electricity, particularly in rural areas where traditional wood and kerosene have been replaced by electricity for cooking and light, has made an important contribution to poverty reduction.

21. ADB aid has promoted renewable energy, regional cooperation, and private sector involvement in the energy sector. ADB assistance in the Lao PDR (see Box A5.2), for instance, has contributed to the development of renewable energy, institutional strengthening in environmental and resettlement management, and the development of interregional cooperation together with the private sector.

Box A5.2: Hydropower in the Lao PDR

The recommendations of project evaluations have resulted in improvements in the design and delivery of more sustainable social and environmental mitigation programs, including the development of baseline data against which to monitor impacts in hydropower projects in the Lao PDR. ADB now includes covenants that provide for long-term monitoring. An example of this is the Nam Theun 2 Hydropower Project, which reached financial closure in May 2005. This project design incorporated recommendations made by OED, including a comprehensive consultation process with the local population, studies of the environmental and social effects of the project, and mitigation measures. However, some NGOs remain concerned that there will be inadequate implementation of the measures needed to offset potential adverse environmental and resettlement impacts, particularly on the poor.

This project is a good example of interregional cooperation, and the development of private sector investments. The plant has been largely funded with private capital. It was constructed as a build-operate-transfer project. There was appropriate risk sharing between the operators and the Thai off-takers. Regional cooperation has been effectively implemented and conforms to ADB's energy sector policy. The plant will contribute revenues to the government of the Lao PDR equivalent to 5% of its total revenue, and is expected to provide significant economic benefits to local communities during construction.

H. Counterfactual in the Power Sector

22. The factors that lead to successful projects are sometimes unique and sometimes overlap with unsuccessful projects. Successful power projects were generally larger and had higher ex-post economic internal rates of return (EIRRs) than partly successful projects. While highly successful projects were implemented with almost no delay and required only 10 person-days of supervision per year, both successful and partly successful projects experienced delays of 2.5 years and required about 17 days of supervision per year (see Table A5).

23. To better understand what might be key to success, eight projects that were rated partly successful were reviewed. The few partly successful power projects generally did not meet covenanted revenue requirements that were necessary to provide funds for sustainable operation, maintenance, and investment (Indonesia, Pakistan, and Sri Lanka). They were often noncompliant with covenants for receivables (Pakistan), and local funding was inadequate (Pakistan). There was a lack of ownership and commitment to policy reforms in at least two of the unsuccessful projects (India, Pakistan). All other aspects discussed above (quality at entry or during implementation, performance of the EA, ADB's contribution, and exogenous factors) were examined without identifying major differences between the successful and the partly successful power projects.

I. Summary

24. Box A5.3 summarizes the characteristics of successful power projects.

Box A5.3: Characteristics of Successful Power Projects

1. Because of the large deficiencies in the supply of energy, demand was not a problem, and benefits were immediate once the projects were completed.
2. Increased electricity supply facilitated economic growth and contributed to a better quality of life.
3. ADB evidenced a long-term commitment to working in the power sector.
4. The plant and equipment were fully utilized, and operated and maintained correctly.
5. Financial policy dialogue and tariff reform helped to ensure sufficient funding for investment, operation, and maintenance.
6. The project management team in the EA showed commitment, quality, and experience; familiarity with ADB's loan requirements; and an ability to learn from previous projects.
7. There was continuity of the EA's staff and the consultants employed to assist with implementation.
8. There was early recognition of problems during implementation and a flexible approach by ADB and the EA to solve problems.
9. ADB support contributed to strengthening institutions.
10. ADB's contributions to successful outcomes included a careful assessment of the capabilities of the EA, a flexible approach to project design and implementation, and regular project review.

Source: OED.

Table A5: Characteristics of Successful Power Projects

Item	Highly Successful		Generally Successful or Successful		Partly Successful[a]		Total	
	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average
Project Characteristics								
Size of Project ($ million)	9	323.0	44	355.0	8	236.9	61	334.8
Economic Internal Rate of Return at Appraisal (%)	9	18.4	41	20.0	7	20.2	57	19.8
Economic Internal Rate of Return at Postevaluation (%)	3	28.7	10	18.4	1	14.9	14	20.4
Planned Implementation Period (years)	9	3.9	44	3.6	8	4.0	61	3.7
Actual Implementation Period (years)	9	4.4	44	6.0	8	6.5	61	5.8
Implementation Delay (years)	9	0.6	44	2.4	8	2.5	61	2.1
Cost Deviation (%)	9	(23.5)	44	(16.6)	8	(17.1)	61	(17.7)
Cost Overrun (%)	1	4.2	8	11.1	2	10.1	11	10.3
Cost Underrun (%)	8	(27.0)	36	(22.7)	6	(26.2)	50	(23.8)
ADB Inputs								
Project Processing Missions	9	2.1	44	2.0	8	2.1	61	2.0
Project Processing Person-Days	9	52.1	44	72.5	8	61.3	61	68.0
Project Administration Missions during Implementation	9	7.4	43	8.0	8	11.9	60	8.4
Project Administration Missions per Year of Implementation	9	1.7	43	1.4	8	1.8	60	1.5
Project Administration Person-Days during Implementation	9	41.3	43	93.8	8	121.5	60	89.6
Project Administration Person-Days per Year of Implementation	9	9.8	43	16.1	8	18.2	60	15.5

[a] No power project approved during the 1990s was rated as unsuccessful.

ADB = Asian Development Bank.

Notes:

"Average" refers to simple mean (i.e., unweighted).

Project size refers to the actual cost of the project, which includes funding from ADB, the government, and other sources.

Implementation period refers to the length of time taken to implement a project (from original date of effectiveness to completion).

Implementation delay is the difference between planned and actual implementation period.

Processing missions comprise fact-finding and appraisal missions.

Administration missions are supervision missions carried out from inception to project completion, excluding PCR missions.

Sources: Project completion reports and project performance evaluation reports of approved power projects since 1990 containing a rating circulated as of 31 December 2005.

LEARNING FROM SUCCESSFUL WATER SUPPLY AND SANITATION PROJECTS

A. Characteristics of Successful Water Supply and Sanitation Projects

1. This review of the factors contributing to the success of Asian Development Bank (ADB) water supply and sanitation (WSS) projects is based on an analysis of 18 projects approved between 1990 and 1997 that were rated successful or highly successful. These covered urban projects, rural projects, and combined urban/rural projects, and focused about equally on water supply and water supply/sanitation projects. There was no discernible difference in the success between the urban and rural projects, with 35–40% of each group being considered highly successful and the rest successful. In terms of lending modality, the large majority were project loans, and a few were sector loans.

2. Successful WSS projects positively affected their intended beneficiaries by providing them with a better quality of life. Benefits were generally long-term and pro-poor, and tended to impact women, children, and other disadvantaged groups proportionately more than men and other socially empowered groups. Successful WSS projects contributed directly to the attainment of the Millennium Development Goals (MDGs). The projects directly addressed MDG Target 10 (halving by 2015 the proportion of people without sustainable access to safe drinking water and improved sanitation).

3. Ongoing and efficient operation and maintenance (O&M) was an important issue in ensuring the long-run sustainability of the benefits of WSS facilities. Successful projects typically were those that (i) were run by financially self-sustaining water supply institutions, (ii) put in place water user committees (WUCs), and (iii) adopted the “user pays” principle. A lesson learned from one project was that the early establishment of WUCs fostered greater beneficiary participation, resulting in a stronger sense of ownership and willingness to accept O&M responsibility among project beneficiaries.

B. Quality at Entry

4. A striking feature of successful WSS projects was their ability to learn from past lessons and incorporate these lessons in project design. For example, a key lesson learned from early rural WSS projects was the effectiveness of the community-based approach to rural water supply. Under such an approach, projects are designed incorporating the learned experience from the community, and communities directly participate in rendering the WSS systems sustainable. Other past lessons successfully adopted in later projects involved designing projects in a cost-effective manner, and strengthening institutional capacities.

5. Technical innovation characterized many of the successful WSS projects. For example, an innovative approach to conserve freshwater resources through induced recharging of water resources using an infiltration basin was first pioneered in the Philippines under an ADB project. In another Philippines project, the construction of a 13 kilometer (km) water supply tunnel (at that time, the longest of its kind in the country) was an innovative solution to convey water for urban use. The alternative solution would have been the construction of 25 km of access roads that would have opened adjacent forest areas to illegal loggers. In Sri Lanka, an innovative caretaker approach, whereby a single person/entity was made responsible for all water supply matters in a designated area, was successfully implemented under an ADB project and then replicated in the Greater Colombo area. The use of public information campaigns was an effective and innovative approach in several project designs in Philippines and Sri Lanka.

6. A participatory approach was adopted in many of the successful WSS projects and appears to have contributed to their success. Successful projects were typically formulated through extensive consultations with local government staff, local nongovernment organizations (NGOs), representatives of indigenous people, and other beneficiaries to discuss concerns about the impacts of WSS projects. This approach helped to foster a sense of ownership and ultimately contributed to improving the sustainability of the projects. As an example, in Indonesia, community participation was emphasized in design, construction, and O&M of subprojects, which led to the achievement of clear socioeconomic benefits such as employment for local people and additional income generated by complementary use of project facilities (in this case, multipurpose ponds).

C. Quality During Implementation

7. The review of successful WSS projects indicates that strong commitment by governments, both national and local, is one of the key determinants of project success. A high level of commitment by municipal/provincial governments in making the project facilities operational as quickly as possible, together with sound management support in the agencies concerned, was a notable feature in the implementation of several of the WSS projects. Strong commitment was particularly evident in projects in the People's Republic of China (PRC) and Thailand.

8. Generally, the original objectives and overall design of successful WSS projects remained unchanged during implementation. Where there were changes in design details, the modifications in general did not result in increased project costs. The ability of the local governments to provide counterpart funds in a timely manner was an important factor for smooth implementation and on-target completion of the WSS projects.

D. Performance of Executing Agency

9. EAs of successful WSS projects were normally committed and highly involved in project implementation. For example, the EAs for a PRC project, the Dalian Water Delivery Company and the Dalian Water Supply Group, both showed very strong commitment, which contributed to smooth implementation, including expeditious procurement, cost savings, project completion ahead of schedule, and significant tariff increases (see Box A6.1). The evaluation of the project noted that the involvement of the Dalian municipal government's executive vice mayor and heads of the municipal government departments and bureaus was the key to the highly successful implementation of the project.

10. Institutional strengthening and training activities figured prominently in successful WSS projects. Training activities were not limited to human resource development but also focused on technical and engineering aspects of the projects, community-based water supply systems survey and design, social facilitation, participatory rural appraisal and rapid rural appraisal techniques, and construction supervision and management. The good performance of consultants was also an important determinant of WSS project success, particularly in the cases where the international consultants hired under the project preparatory technical assistance (PPTA) were retained for project implementation, as was the case in some projects. ADB's *Guidelines on the Use of Consultants* was recently revised and no longer allows PPTA consultants to participate in project implementation. This may be problematic if good quality consultants decide not to take part in the PPTA work because they would not be allowed to participate in the resulting loan project.

Box A6.1: Dalian Water Supply Project in the PRC[1]

Dalian is a main port city located at the southern end of the Liaodong Peninsula in Liaoning Province in the northeastern PRC. In 1984, Dalian was declared an "open" coastal city and given a large degree of autonomy in its economic planning. The Dalian Economic and Technology Development Zone, established in 1988, has been one of the most successful economic zones in the PRC.

By the early 1990s, water shortages in Dalian were a serious constraint to economic growth and development. The water shortage was so severe that many areas had water service for only a few hours a day, and the pressure in the system sometimes was insufficient to provide water to higher elevations in the city for several days. In addition, frequent service disruptions had major implications for public health. Excessive extraction of groundwater was in some cases endangering the environment. The Dalian Water Supply Project, the first PRC project ADB funded in the water supply sector, provided new infrastructure to address the shortage as well as to meet the growing demand for water. During implementation, two small subprojects were added using loan savings. These comprised the expansion and rehabilitation of the Pulandian and Jinshitan water supply systems.

The project achieved its objectives and more. At completion, all facilities constructed were being operated satisfactorily. The 73,000 residential connections in Dalian exceeded the number projected at appraisal. In Pulandian and Jinshitan, the connections totaled 42,000 and 600, respectively, also slightly higher than at reappraisal. All customers had 24-hour supply, and the quality of water met national standards. The project also increased the supply to commerce and industry, removing potential constraints to economic expansion in Dalian Municipality and improving the investment environment. Use of groundwater by industrial and residential consumers has been reduced. The evaluation of the project confirmed two important findings: First, commitment by the local government is the most important factor contributing to the success of WSS projects. Second, consumers will accept and understand the need for higher tariffs once they are certain that water supply services are improved and became adequate and reliable. Tariffs increased substantially, at an average rate of 12.8% per year, from 1995 to 2001.

[1] ADB. 2003. *Dalian Water Supply Project in the People's Republic of China.* Manila.

E. ADB's Contribution to Project Success

11. ADB fielded 10–12 review missions per project, which is deemed adequate from a project supervision standpoint. Of the 16 projects reviewed, 3 had been delegated to the respective resident mission for implementation. A few of the projects evaluated cited examples of ADB missions proactively solving project implementation problems. For example, in the case of a Philippines project, ADB proactively introduced monthly coordination meetings among the EAs and implementing agencies, which was well received and proved to be an effective mechanism for promoting procurement activities and resolving issues. Good project administration can contribute to good project outcomes.

F. Exogenous Factors

12. Two main exogenous factors influenced WSS projects. The first is urbanization, which has proceeded rapidly in the Asia and Pacific Region in the last decade.[1] In line with this increased urbanization, the demand for WSS services has grown rapidly in the growing towns,

[1] For a discussion of urbanization in the Asia Pacific Region, see ADB. 2006. *Urban Sector Strategy and Operations*. Manila.

secondary cities, and the region's megacities. This growth in demand has created a need for investment for the sustainable delivery of WSS services.

13. Decentralization is the second factor that influenced WSS projects. In countries such as Indonesia, Philippines, and Thailand, decentralization reforms took place during the late 1990s and early 2000s, which led to devolution of responsibility for policy, planning, financing, and decision making for WSS development to the local government level. Local governments in these countries are now increasingly undertaking cost-recovery measures, tariff reviews, and tariff increases, sometimes in consultation with local residents. These reforms and other measures allow a greater role for local planners. If local institutional capacity is developed, this has the potential to have a positive effect on project implementation. However, there are sometimes disruptions during the early years of decentralization.[2] In the future, ADB will face the challenge of finding innovative ways to offer its products and services to regional and local government units and other subsovereign entities.

G. Cross-cutting Themes

14. Cross-cutting themes common to all of the successful projects included issues of environmental protection and capacity building. The projects with successful wastewater components, in particular, had a strong positive environmental impact due to the reduction of untreated wastewater allowed to flow back into the ecosystem. The better water quality due to the treatment contributed to improvements in freshwater, coastal, and marine ecosystems. The more rational use of water resources in water supply components also had a positive effect on water aquifers and water tables in the project areas. Capacity-building initiatives, as noted above, also contributed to the success of projects.

15. Other cross-cutting themes common to a number of projects included poverty reduction and support for gender/children issues. The improvements in WSS facilities in most cases were strongly pro-poor. Poor and disadvantaged persons in the project areas benefited both directly from improved health, thereby reducing medical expenses, as well as indirectly from increased availability of scarce medical services due to other nonpoor persons being healthier. Some of the most successful WSS projects were those that relieved women and children of the hardship of long-distance water collection—a task that they traditionally bear more than men. As a result of improved water supply, greater productivity and improved health were achieved, as more time was available for family care, education, and income-generating activities that would have otherwise been used for water fetching. This impact was particularly evident in successful projects in Nepal, Sri Lanka, and Viet Nam.

H. Counterfactual in the Water Supply/Wastewater Treatment Sector

16. To better understand the factors that contribute to the success, or lack thereof, of water supply/wastewater treatment projects, some key indicators were compared among highly successful, generally successful, and partly successful/unsuccessful projects (see Table A6). On average, highly successful projects were larger than successful projects, which, in turn, were larger than unsuccessful projects. In this sector, smaller projects, which presumably should be easier to design and implement, do not have a higher probability of success. Highly successful projects are less likely to be delayed (the average delay in implementation was less than a year). Surprisingly, the average delay in implementation for successful WSS projects (2.3 years) was slightly longer than that for less than successful projects (1.5 years). Cost variation is not a

[2] ADB. 2005. *Country Assistance Program Evaluation for Indonesia.* Manila.

Table A6: Characteristics of Successful Water Supply and Sanitation Projects

Item	Highly Successful		Generally Successful or Successful		Partly Successful[a]		Total	
	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average
Project Characteristics								
Size of Project ($ million)	6	230.3	18	77.0	8	31.9	32	94.5
Economic Internal Rate of Return at Appraisal (%)	3	17.6	8	17.9	3	15.7	14	17.4
Economic Internal Rate of Return at Postevaluation (%)	[a]	[a]	[a]	[a]	[a]	[a]	3	15.9
Planned Implementation Period (years)	6	4.0	18	4.2	8	4.1	32	4.1
Actual Implementation Period (years)	6	4.8	18	6.5	8	5.7	32	6.0
Implementation Delay (years)	6	0.7	18	2.3	8	1.5	32	1.8
Cost Deviation (%)	6	(16.3)	18	(4.6)	8	(21.4)	32	(11.0)
Cost Overrun (%)			7	19.1			7	19.1
Cost Underrun (%)	6	(16.3)	11	(19.7)	8	(21.4)	25	(19.4)
ADB Inputs								
Project Processing Missions	6	1.7	15	1.9	8	2.0	29	1.9
Project Processing Person-Days	6	135.8	15	109.1	8	89.1	29	109.1
Project Administration Missions during Implementation	6	7.5	18	11.1	8	10.5	32	10.3
Project Administration Missions per Year of Implementation	6	1.9	18	1.9	8	2.2	32	2.0
Project Administration Person-Days during Implementation	6	86.7	18	139.4	8	116.4	32	123.8
Project Administration Person-Days per Year of Implementation	6	20.5	18	24.8	8	22.5	32	23.4

[a] EIRRs at appraisal were not recalculated at postevaluation.

ADB = Asian Development Bank.

Notes:

"Average" refers to simple mean (i.e., unweighted).

Project size refers to the actual cost of the project, which includes funding from ADB, the government, and other sources.

Implementation period refers to the length of time taken to implement a project (from original date of effectiveness to completion).

Implementation delay is the difference between planned and actual implementation period.

Processing missions comprise fact-finding and appraisal missions.

Administration missions are supervision missions carried out from inception to project completion, excluding PCR missions.

Sources: Project completion reports and project performance evaluation reports of approved water supply projects since 1990 containing a rating circulated as of 31 December 2005.

good predictor of whether WSS project outcomes will be, or will not be, successful. All seven projects that experienced cost overruns, averaging 19.1%, were rated as successful. Cost underruns averaged about 20% for all groups of WSS projects. The amount of ADB supervision did not vary significantly across projects, averaging about two missions and 23 person-days per year of implementation.

17. Over the period studied, 16 WSS projects were rated as partly successful or unsuccessful by project/program evaluation reports and project/program completion reports—7 in the Philippines; 2 in the Lao People's Democratic Republic; 2 in Pakistan; and 1 each in Cambodia, Indonesia, Marshall Islands, Federated States of Micronesia, and Viet Nam. Differences were examined between these projects and the successful and highly successful projects to better understand the factors that contribute to successful WSS projects.

18. Adverse exogenous factors were associated with the lack of success of some of the projects. Nearly half of the less successful projects were located in the Philippines, which has over the years experienced macroeconomic and fiscal problems. These problems often affected counterpart funds availability and limited the financing available for maintenance of WSS systems.

19. Less than successful WSS projects suffered from operational shortcomings due to lack of proper balancing among economic, financial, and social objectives in the project design and operation; institutional constraints; and funding deficiencies that placed benefits at risk over the long term. Weaknesses in WSS projects rated as less than satisfactory included (i) a mismatch of technology or design with the resource base of target communities, (ii) low tariff rates and problems of financial sustainability, (iii) insufficient consideration of alternatives for attaining the project's objectives, and (iv) high water losses.

20. An example of a poorly designed WSS project was the Majuro Water Supply and Sanitation Project in the Marshall Islands. Although the Project achieved its overall objective of enhancing water supply and sanitation for Majuro, this was achieved using an overdesigned and high-cost technical solution. Two factors exacerbated the situation. First, the system was designed for a much larger population and greater demand than was realistically possible at the time of appraisal, and it neglected to take account of the city's reservoir capacity. Second, the consultants engaged for the project preparatory work did not undertake adequate dialogue and consultation with the local community and with the staff of the utility.

I. Summary

21. Box A6.2 summarizes the characteristics of successful WSS projects.

Box A6.2: Characteristics of Successful Water Supply/Wastewater Treatment Projects

1. Rapid urbanization created a strong demand for the output of water supply/wastewater treatment projects.
2. There were positive impacts on intended beneficiaries, particularly women.
3. There was an ability to learn from past lessons and incorporate the lessons in project design.
4. Technical innovation and a positive impact on the environment occurred.
5. Proper O&M helped ensure long-run sustainability.
6. The projects typically (i) were run by financially self-sustaining water supply institutions, (ii) put in place WUCs, and (iii) adopted the "user pays" principle.
7. A participatory approach contributed to success. Successful projects were typically formulated through extensive consultations with local government staff and the local community, including NGOs. Beneficiary participation resulted in a stronger sense of ownership and willingness to accept some O&M responsibility and to pay higher tariffs.
8. EAs were committed, highly involved in project implementation, supported by institutional strengthening and training activities, and provided with counterpart funds in a timely manner.
9. Consultants and contractors performed well.
10. Regular ADB review missions proactively helped to solve problems.

Source: OED.

LEARNING FROM SUCCESSFUL EDUCATION PROJECTS

A. Quality at Entry

1. Thirty-two Asian Development Bank (ADB) education projects approved during 1990–1997[1] were rated as successful or highly successful by project performance evaluation reports (PPERs) and project completion reports (PCRs), equivalent to 76% of the rated projects approved during the decade. They covered four education subsectors: technical education and vocational training (TEVT, 39% of lending),[2] secondary education (26%), primary/basic education (18%), and higher education (17%).[3] Over time, there has been a shift in the composition of ADB lending in the education sector in favor of basic education.

2. All successful projects were relevant. They reflected the governments' education strategies and were aligned with the countries' expressed development needs. For example, the Primary Education Sector Project (Bangladesh) and the Education Quality Improvement Project (Lao People's Democratic Republic [Lao PDR]) were part of their respective governments' commitments to achieve universal primary education. The Junior Secondary Education Project (Indonesia) was designed to support universal basic education and implement the national curriculum. Similarly, the Basic Skills Project in Cambodia and the Postsecondary Education Rationalization Project in the Lao PDR were consistent with the needs of postconflict economies for skilled and semiskilled workers.

3. The highly successful Education Sector Development Program in Mongolia was designed to transform the education sector to match the changing requirements of an economy in transition from a centrally planned to a market-oriented system. Mongolia's Education Sector Development Program recognized that the government had limited absorptive capacity, especially for implementing externally financed projects. Thus, it used a sector development program modality[4] to achieve broad policy reforms to meet immediate needs at the institutional level.

4. Another characteristic of successful projects was their participatory approach for project design and implementation. Successful projects built alliances and shared ownership by engaging with, and addressing the priorities of, a broad range of stakeholders. The Basic Education Project in Indonesia, for example, built a successful partnership among the project schools, the government, and ADB through a matching grant program designed to improve school facilities. The Junior Secondary Education Project (Indonesia) involved the community in school management and operation and maintenance (O&M) activities.

5. Many successful projects were part of a series of continuing projects addressing the same objectives in the same subsector. Consistency and continuity helped to make a sustainable impact. For example, the Second Girls Primary School Sector Project (Pakistan)

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[1] There were 42 education projects approved in the 1990s that have been completed and rated.

[2] One reason for the high lending proportion in the TEVT subsector is that it also included three skills development and nonformal education projects (totaling $126.7 million), since these projects provided "vocational" training.

[3] During the latter half of the 1990s, most of the lending in education went to basic education in response to ADB's education strategy. As a result, during 1991–2000, basic education accounted for 41% of all lending in the education sector, followed by secondary education (23%), TEVT (23%), and higher education (13%). During 2001–2005, the share of basic education increased to 72%, followed by TEVT (14%), secondary education (9%), and higher education (5%). Prior to 1990, about half of all lending in the education sector went to TEVT, followed by higher education (30%), secondary education (10%), and basic education (10%).

[4] This was ADB's first sector development program.

was designed to build on the experience and achievements of an earlier project. The Private Junior Secondary Education Project in Indonesia, which was designed to strengthen the role of private community schools catering to poor students, complemented the Junior Secondary Education Project, which focused on public schools. Learning from past experience can help to improve the probability of project success.

B. Impacts on Beneficiaries

6. A factor underlying project success was the critical mass of benefits/beneficiaries created by the projects. Some of these projects, though small in terms of loan amounts, had nationwide impacts when ADB effectively complemented much larger levels of government funding and the work of other aid agencies. For example, some major policy reforms were adopted under the Education Sector Development Program (Mongolia), including strengthening education management capacity, rationalizing/restructuring about 170 schools, introducing a cost-sharing secondary education textbook scheme, developing a policy framework on TVET, and promoting private sector provision and privatization of higher education. Together, these reforms had a significant, positive impact, including increased enrollment at all education levels during 1996–2002 and an increased retention rate of children who started grade 1 reaching grades 7–10. The Basic Education Textbook Project (Cambodia) provided quality textbooks to about 3 million students, and teacher guides to 70,000 teachers nationwide. These outputs contributed to achieving increased student pass rates and reduced dropout rates. The Postsecondary Education Rationalization Project (Lao PDR) consolidated various colleges to form the National University of Lao and provided overseas training to about 500 faculty and staff. University enrollment increased from about 8,000 to 18,000 during 1996–2002. About 80% of the 3,000 graduates in 2003 found jobs within a year.

7. Another success factor in the education projects was the emphasis on cross-cutting themes, especially poverty reduction and gender concerns. For example, the Secondary Education Development Project (Bangladesh) provided stipends to 1.4 million female students in rural and disadvantaged areas. This led to increased female enrollment, which accounted for 45% of total enrollment during 1993–2000. The Second Girls Primary School Sector Project (Pakistan) helped to increase girls' enrollment in rural areas by about 200,000 during 1996–2005 through the establishment of community model schools for girls in union councils. The Skills Development Project (Thailand) established a women-friendly center and developed seven women-friendly training packages. This resulted in increased enrollment of women at the 22 skill development centers and institutes from 15% to 40% during 1994–2002.

8. Successful projects generally had satisfactory institutional impacts which, in turn, contributed to achieving project outcomes/impacts. The institutional impact of the Higher Education Project in Indonesia, for example, was substantial. A new generation of lecturers (about 800) was created from the project's overseas and in-country fellowship and training programs. Their improved management capacity and academic skills subsequently contributed to strengthening teaching and research capabilities in regional universities. Some of these universities were then able to develop their own self-financed master's degree programs, and their lecturers were able to obtain funding support elsewhere to conduct research work.

C. Quality During Implementation

9. Despite delays in implementation, several education projects used resources efficiently and achieved some cost savings without affecting project outputs. While most of the savings resulted from the depreciation of the local currencies against the dollar, some savings resulted

from substituting qualified domestic experts for expensive international consultants, as well as lower unit costs of equipment and instructional materials than estimated at appraisal.

10. Some successful education projects helped to rationalize national education systems. The Education Development Project (Cook Islands), the Education Quality Improvement Project (Lao PDR), the Postsecondary Education Rationalization Project (Lao PDR), the Education Sector Development Program (Mongolia), and the Secondary Education Development Project (Sri Lanka) helped rationalize the education systems in these countries by restructuring and consolidating schools/classrooms to increase economies of scale in operations, thus increasing cost effectiveness and efficiency.

11. Project facilities were generally well utilized in the successful education projects. The exceptions were some projects at the TEVT and higher education levels, in which some sophisticated science/engineering equipment and buildings were underused.

12. Consultants and contractors generally performed well in most of the successful projects and contributed to the achievement of development results. A notable case was the highly successful Secondary Education Development Project (Sri Lanka), in which the international team leader proved to be very effective in encouraging hands-on participation and cooperation among consultants and concerned government agencies. This experience emphasizes the importance of thoroughly assessing the qualifications and experience of consultants before making the recruitment decision.

D. Sustainability of Project Benefits

13. Unlike TEVT and higher education projects, basic and secondary education projects are generally not able to recover costs. In the absence of adequate budgetary support from the government, such projects are not sustainable. Continued financial commitment from government is important for project success.

14. Prospects for sustainability were good for education projects that were able to recover costs and/or generate revenues. The Vocational and Technical Education Project in Indonesia set up production units in most project schools to sell products, courseware, curriculum guides, and training packages to private schools as a way to generate an income stream. Some of these units were able to realize sizeable revenues. Schools that offered courses on food and beverages, hotel, cosmetology, and tourism also operated business units. The Postsecondary Education Rationalization Project (Lao PDR) developed demand-based evening courses that generated tuition, boarding, and lodging fees sufficient to offset costs. These revenues accounted for 60% of the total revenues of the National University of Lao.

E. Performance of Executing Agencies

15. The borrowers of successful projects generally made counterpart funds available as required and complied with loan covenants. Implementation delays were endemic even in successful education projects, with delays ranging from a few months to 2 years in the Technical Education Project (Pakistan). The main reasons for the delays included difficulties in recruiting staff, frequent changes of project directors, lengthy and inadequate understanding of procurement/consultant selection procedures, and poor monitoring. Long delays reflected weak ownership/commitments on the part of governments. Not surprisingly, successful projects had fewer and shorter delays. Executing agencies (EAs) of successful projects were more committed and their institutional readiness was greater than their partly successful counterparts.

They were better able to plan, manage, implement, and monitor the projects and therefore better able to minimize delays. Institutional readiness should be an important consideration in loan negotiations, as it appears to be an important driver of project success.

16. The ability of EAs to monitor and coordinate project activities is related to the number of agencies and institutions involved in a project. As their number increases, so too do problems with implementation, monitoring, and coordination. However, some successful projects like the Higher Education Project (Indonesia), which included seven public and eleven private universities spread across different islands, succeeded in managing this institutional complexity.

F. ADB's Contributions to Project Success

17. Consistent ADB involvement over a long period contributed to successful outcomes in the education sector, particularly when sector/subsector reforms were pursued.

18. For successful projects, ADB generally provided enough supervisory missions, an average of 11 missions and 190 mission person-days. One lesson learned is that sometimes ADB needs to increase the quality of the supervision missions. In some of the successful projects, the quality of supervision missions was positively noted, particularly in trying to resolve various implementation issues (in relation to procurement, financial management, and reporting) at early stages such as in the Basic Education Textbook Project (Cambodia), the Postsecondary Education Development Project (Lao PDR), and the Basic Skills Project (Cambodia). In a partly successful project (Bangladesh's Higher Secondary Education Project), many review missions were combined with other projects so enough attention may not have been devoted to this project.

19. ADB was particularly active in the preparation phase of the first education projects in Cambodia (Basic Skills Project) and Mongolia (Education Sector Development Program). Its activities in these projects reflect early recognition of the limited absorptive capacity of the two governments, and the corresponding importance of early intervention to project success.

20. The involvement and support of resident missions appears to have been an important factor in the success of some projects. Most of the education projects in Indonesia, for example, were delegated to the resident mission. This facilitated project implementation. Other resident missions (e.g., in Bangladesh, Cambodia, Lao PDR, Pakistan, and Sri Lanka) provided support and guidance during implementation and coordinated with other funding agencies. The Bangladesh Resident Mission also provided support in terms of advice to an education project in Bhutan (Technical and Vocational Education and Training Project).

G. Exogenous Factors

21. The 1997 Asian financial crisis was the major exogenous factor affecting education projects in Thailand (Skills Development) and Indonesia (six projects) that were active at the time. This crisis resulted in implementation delays, depreciation of the local currencies, and severe pressures on the governments' fiscal position and public sector management. However, in successful education projects ways were found to overcome these challenges so that the achievement of development results was not imperiled by the fiscal crises.

H. Counterfactual for the Education Sector

22. For the education sector some key parameters were compared for highly successful, generally successful, and partly successful projects to see if there were significant differences (see Table A7). This was supplemented by a review of PPERs and PCRs to determine some of the major differences between education projects that were rated as successful and those that were not.

23. Size and complexity seem to be related to project success in the education sector. The average cost of a partly successful project ($365.5 million) was 4 to 5 times larger than the average cost of a successful ($74.7 million) or highly successful ($99.6 million) project. Cost deviations were more likely to be associated with partly successful projects. Cost overruns were relatively infrequent for education projects approved in the 1990s. One partly successful project had a cost overrun of 29%. The cost overrun experienced in the one successful project was 3.9%. Cost underruns were larger in partly successful projects (-29%) than in successful (-20%) and highly successful (-15%) ones.

24. Implementation delays were not a good predictor of project success. Delays in the implementation of education projects approved in the 1990s were modest, averaging 1.3 years. Delays in partly successful projects (1.8 years) were only slightly longer than the delays in successful education projects (1.1 years).

25. There was an inverse relationship between the number of ADB staff-days committed during project processing and project success. The education projects that turned out to be partly successful received the most input from ADB staff during project processing missions, an average of 93 days. The corresponding figures were lower for successful (86 days) and highly successful (56 days) projects. Further analysis would be needed to explain why this is so. After adjusting for differences in the time required for implementation, it appears that ADB staff spend more time on review missions for partly successful education projects (an average of 32 days per year), than for successful (23 days) or highly successful (21 days) ones. This suggests that ADB recognizes that more time and effort are needed to address the difficulties that arise in education projects that are ultimately judged to be less than successful.

26. The review of PPERs and PCRs identified the following characteristics of partly successful education projects:

(i) In partly successful projects, more attention was paid to the quantity of review/supervisory missions than to the quality of their work. Generally, more supervisory missions were fielded for the poorer performing education projects than was the case for successful and highly successful projects (both in terms of mission numbers and person-days). However, many of these missions were combined with other projects and did not appear to be successful in resolving problems.

(ii) Partly successful projects had less institutional readiness as reflected in longer delays in project startup compared with successful and highly successful projects (with the average number of months between loan approval and effectiveness of 9.6 vs. 3.8, and the average number of months between loan effectiveness and first disbursement of 6.9 vs. 3.5).

(iii) For skills improvement projects, beneficiaries could not use their acquired skills in the job market, because there was little linkage in the project design between the education and employment opportunities.

Table A7: Characteristics of Successful Education Projects

Item	Highly Successful		Generally Successful or Successful		Partly Successful[a]		Total	
	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average
Project Characteristics								
Size of Project ($ million)	7	99.6	25	74.7	10	365.5	42	148.1
Economic Internal Rate of Return at Appraisal (%)								
Economic Internal Rate of Return at Postevaluation (%)			4	10.8			4	10.8
Planned Implementation Period (years)	7	5.0	25	5.2	10	5.0	42	5.1
Actual Implementation Period (years)	7	6.1	25	6.4	10	6.9	42	6.4
Implementation Delay (years)	7	1.1	25	1.1	10	1.8	42	1.3
Cost Deviation (%)	7	(12.5)	25	(20.1)	10	(23.3)	42	(19.6)
Cost Overrun (%)	1	3.9			1	28.9	2	16.4
Cost Underrun (%)	6	(15.3)	25	(20.1)	9	(29.1)	40	(21.4)
ADB Inputs								
Project Processing Missions	7	1.3	25	2.1	10	1.8	42	1.9
Project Processing Person-Days	7	56.0	25	86.1	10	92.6	42	82.6
Project Administration Missions during Implementation	7	9.6	24	10.1	10	11.4	41	10.3
Project Administration Missions per Year of Implementation	7	1.6	24	1.6	10	1.7	41	1.6
Project Administration Person-Days during Implementation	7	125.7	24	146.1	10	180.0	41	150.9
Project Administration Person-Days per Year of Implementation	7	20.9	24	23.1	10	31.7	41	24.8

[a] No education project approved during the 1990s was rated as unsuccessful.

ADB = Asian Development Bank.

Notes:

"Average" refers to simple mean (i.e., unweighted).

Project size refers to the actual cost of the project, which includes funding from ADB, the government, and other sources.

Implementation period refers to the length of time taken to implement a project (from original date of effectiveness to completion).

Implementation delay is the difference between planned and actual implementation period.

Processing missions comprise fact-finding and appraisal missions.

Administration missions are supervision missions carried out from inception to project completion, excluding PCR missions.

Sources: Project completion reports and project performance evaluation reports of approved education projects since 1990 containing a rating circulated as of 31 December 2005.

(iv) None of the partly successful projects used a participatory approach for project design and implementation.
(v) There was poor performance of consultants, contractors, and suppliers (e.g., poor construction quality, poor site selection, and poor quality of some materials used).
(vi) Noncompliance or long delays in compliance occurred with loan covenants requiring the provision of counterpart funds during implementation.
(vii) Funds were lacking for operation (e.g., payment of salaries of teachers or the cost of equipment and textbooks) or for maintenance.
(viii) Difficulties were experienced in managing the implementation of projects that covered a large geographic area.

I. Summary

27. Box A7 summarizes the characteristics of successful education projects.

Box A7: Characteristics of Successful Education Projects

1. The projects were consistent with the DMCs' education strategies.
2. Borrowers made counterpart funds available as required and complied with loan covenants.
3. Committed EAs were able to plan, manage, implement, and monitor the projects and benefited from capacity-building support. Institutional readiness is an important driver of project success.
4. A series of projects and consistent ADB involvement over a long period contributed to successful outcomes, particularly when sector/subsector reforms were pursued.
5. Participatory approaches were used for project design and implementation and to build alliances and shared ownership by engaging with a broad range of stakeholders.
6. Basic and secondary education projects are generally not able to recover costs, so adequate budgetary support is essential for project sustainability; technical, vocational, and higher education projects recovered some costs and generated revenues.
7. There was an emphasis on cross-cutting themes, especially poverty reduction and gender concerns.
8. Project facilities were well utilized and maintained.
9. Consultants and contractors performed well.
10. ADB supervision missions resolved implementation issues.

Source: OED.

LEARNING FROM SUCCESSFUL IRRIGATION AND DRAINAGE PROJECTS

A. Irrigation and Drainage Projects

1. In 2004, the Asian Development Bank (ADB) updated the sector and thematic classification and identified irrigation and drainage (ID) as one of the subsectors under the agriculture and natural resources (ANR) sector.[1] ID projects had previously been clustered with rural development projects. Based on the 120 projects rated at the end of 2005, this group had a success rate of 56%. The ID subgroup had a success rate of 55%. ADB has provided loans totaling $4.1 billion for 105 ID projects in 18 developing member countries (DMCs). This represents 4% of the total ADB loan portfolio and 26% of ADB loans to the ANR sector. The ID projects have been supported by 151 technical assistance (TA) activities amounting to $66.4 million. Bangladesh, Indonesia, and Pakistan have been the main recipients of this assistance, receiving 74% of ID loans and 49% of ID-related TAs. Given that the success rates of ID projects are significantly lower than in other sectors, it is particularly important for ADB to learn lessons that result in successful ID projects.

2. The assessment of factors contributing to the success of ID projects was based on the analysis of 21 projects approved between 1969 and 1988 and rated as successful or generally successful in their respective project performance evaluation reports (PPERs) and/or project completion reports (PCRs).[2] The review also drew on recent literature, the Operations Evaluation Department's (OED) Post Evaluation and Information System, and selected ADB studies,[3] particularly those undertaken by OED to substantiate review findings.

B. Demand for Irrigation Services and Enabling Environment

3. Irrigation projects are often needed to improve agricultural productivity and increase crop yields and cropping intensities. Based on the projects reviewed, the demand for irrigation services by DMCs at the national level and by farmer beneficiaries at the local level was one of the prerequisites for the success of ID projects. Demand can be measured as a function of actual usage or, alternatively, by participants' willingness to pay for benefits. A high demand for irrigation services was noted among the successful ID projects. The projects often related to national policies and programs on water management (Pakistan) or food security policies and programs (Bangladesh, Indonesia, Philippines, and Thailand).

4. An enabling environment is needed to allow farmers to supply the demand for their produce. Examples include (i) a policy and institutional framework that promotes sound water resource management; (ii) a legal framework for water user associations that promotes cost recovery at least sufficient to finance sustainable operation and maintenance (O&M); (iii) rural infrastructure (e.g., roads that allow farmers to market their products, and farm inputs to be delivered when they are needed); (iv) efficient markets that are free of price distortions and

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[1] ADB. 2004. *Updating Sector and Theme Classification at the Asian Development Bank*. Manila.

[2] ADB. 1980. *Project Performance Evaluation Report* on *Loan 479-INO: Lower Citanduy Irrigation*, approved on 13 November 1980 was included in the set of projects reviewed, as it was rated generally successful based on a re-evaluation study in November 1996.

[3] The broader evaluation studies used in this review, in addition to the PPERs and PCRs, included (i) ADB. 2004. *Special Evaluation Study on Effectiveness of Participatory Approaches in Rural Development Projects*. Manila; (ii) ADB. 2003. *Special Evaluation Study on Participatory Approaches in Forest and Water Resources Operations in Selected Developing Member Countries*. Manila; (iii) ADB. 2000. *Sector Synthesis of Evaluation Findings in the Irrigation and Rural Development Sector*. Manila; (iv) ADB. 1999. *Performance Assessment of Agriculture Projects*. Manila; (v) *ADB.* 1998*. Special Evaluation Study of Factors Affecting Project Performance in the Agriculture and Social Sector: A Review of Post-evaluation Reports Between 1991 and 1997*. Manila; and (vi) ADB. 1995. *Sector Synthesis of Post Evaluation Findings Report in the Irrigation and Rural Development Sector*. Manila.

barriers to competition for both farm products and agricultural inputs; and (v) access to information on demand, prices, and technology. To successfully capture the opportunities created by growing markets, supportive alliances must be created among upstream and downstream business partners (i.e., suppliers and service providers of agricultural inputs and implements such as farm machines, agricultural processing entities and others related to markets). Extension services must be provided; there must be access to improved seeds, fertilizers, pesticides, and technologies; and private sector merchants must be involved in marketing the incremental produce.

C. Stakeholder/Beneficiary Participation

5. A sound understanding of the roles and responsibilities of farmers and water user associations is a feature of successful ID projects. Adequate O&M is a necessary condition to sustain project benefits and ensure that ID facilities remain functional. Successful projects are characterized by the involvement of direct stakeholders and beneficiaries in all project phases, particularly O&M. This was reflected in projects in Nepal and Philippines, where farmer-managed irrigation systems and farmer/water users associations took part in O&M activities. Globally, the collection of irrigation service fees is good practice to finance and sustain O&M activities. In the Philippines and Nepal cases, farmers themselves collected the fees. This resulted in better collection efficiency and minimal administrative and transaction costs for the executing agency (EA). Increasing the responsibility of farmer groups also conforms to good practice[4] among ID projects. Beneficiary involvement increased the sense of ownership and responsibility among the participants. Similar patterns were evident in Indonesia and Pakistan. In general, beneficiary participation in every phase of the project cycle contributes to successful ID projects. This was substantiated by an OED Special Evaluation Study focusing on participatory approaches in forest and water sector operations.[5] Water user associations should be formed early in the project cycle and training provided. Good participatory techniques reflect the diversity of social structures and representation of diverse interests in decision-making processes.

D. Impacts on Beneficiaries

6. Irrigation offers a range of benefits, both direct and indirect. Irrigation plays a key role in addressing national food security concerns. In addition, successful ID projects contribute to improvements in (i) agricultural productivity; (ii) employment opportunities, particularly for marginal and landless workers; (iii) transport systems, through better farm and access roads; (iv) women's participation; and (v) institutional capabilities, specifically for projects with accompanying TAs for institutional strengthening. The analysis of beneficiaries is often limited to those who cultivate the earth. Successful ID projects result in the growth of both on-farm and off-farm activities.

7. Irrigation impacts vary across countries and among beneficiaries. In most cases, benefit distribution of ID projects is proportional to the amount of irrigated land worked by a farmer. Farmers with larger landholdings have benefited more relative to small and marginal farmers,

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[4] Hussain, Initzar. 2005. *Pro-poor Intervention Strategies in Irrigated Agriculture in Asia. Poverty in Irrigated Agriculture: Issues, Lessons, Options and Guidelines. Bangladesh, China, India, Indonesia, Pakistan and Vietnam*. Final Synthesis Report. Sri Lanka: IWMI. Also available in http://www.adb.org/water/actions/REG/irrigation-initiatives.asp.

[5] ADB. 2003. *Special Evaluation Study on Participatory Approaches in Forest and Water Resources Operations in Selected Developing Member Countries*. Manila.

particularly irrigation tail-end users.[6] In some successful ID projects in Pakistan, efficient irrigation facilities minimized the gap by ensuring that adequate water supply reached tail-end users, which are usually small farmers. In addition, the focus on on–farm irrigation and drainage for small farmers enabled them to directly benefit from such projects, which turned-out to be a high-return venture, considering the small incremental investment requirements. However, based on the review, the actual economic internal rates of return (EIRRs) of successful ID projects were significantly lower than their appraised values. The average EIRR at appraisal was 32% in contrast to a still highly successful 18% at postevaluation.[7] ID projects have benefited many poor farmers who did not have a stable water supply prior to the project.

8. The successful irrigation projects reviewed revealed no significant adverse environmental and resettlement impacts. In some instances, negative externalities were avoided through project reformulation and policy dialogue. In Nepal, for instance, the East Rapti Irrigation Project was reformulated to prevent possible negative environmental impacts on a national park.

E. Quality at Entry

9. Successful ID projects tended to have good quality at entry, including the quality of the project preparatory technical assistance (PPTA) or feasibility study, project design, incorporation of lessons from prior projects, and level of stakeholder participation.

10. There is a direct linkage between the quality of the feasibility study and eventual project success. For most (95%) of the successful ID projects, the PPTA did a good job identifying potential implementation problems, assessing institutional capabilities, and exploring various design alternatives. In the case of Bangladesh, PPTA was instrumental in promoting the use of indigenous technology and methods of good design. This was significant in reducing the project cost. Important aspects of good design include a sound sector diagnosis covering policies and institutions, a good assessment of the whole value chain, and a sound understanding of national/river basin natural resources management opportunities and constraints. A sound planning process includes a careful assessment of market opportunities, input and output value chains, and realistic targets in terms of crop intensities and yields. Appropriate water distribution arrangements must be developed with the water user associations, and the project design must ensure that water actually reaches the tail end of the canal systems and individual water users.

11. The design of irrigation systems needs to be appropriate and flexible to reflect local needs and conditions. The project design stage provides the opportunity to identify potential problems and appropriate solutions based on a set of alternatives. The consideration of alternatives was important in the eventual success of projects in Bangladesh, Republic of Korea, and Pakistan. An appropriate design needs to be based on local conditions and previous experience. Flexibility in designing projects to reflect local conditions and avoid negative environmental impacts is also good practice. For instance, the Nepal and Philippine experiences of strengthening water user/farmer institutions can be replicated in areas where small irrigation systems are a priority. In Bangladesh and Pakistan, the incorporation of lessons in the design of projects that have a successful precedent are examples of good practice that contributed to eventual project success.

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[6] This observation was corroborated by an ADB-funded International Water Management Institute (IWMI) study and was evident in South Asian countries, where resource endowments were skewed in favor of a few.

[7] The figures are higher relative to the combined EIRR average of partly successful and unsuccessful projects at appraisal (18%) and after evaluation (7%).

12. A good design is usually a product of extensive stakeholder consultations. Participatory approaches were utilized in most of the successful ID projects reviewed. The fundamental lesson is that the participation of local communities from project inception contributes to project success. One of the benefits of employing participatory techniques that have contributed to project success is the acceptance of more responsibilities (commitments) and improved ownership by project beneficiaries.[8] Participation in all phases of the project cycle involved consultants, beneficiaries, the EA, local organizations, and other stakeholders. The consultative process facilitated the assessment of the relevance and suitability of the project design, including the capability of the EA. As a caveat, however, the quality and the extent of participatory approaches should also be assessed, as this practice was also observed in not so successful projects. An OED study[9] revealed that reflecting local realities in the design of the intervention is far more important than relying on a standard package of participatory approaches with no clear purpose.

F. Quality During Implementation

13. A distinct feature of successful ID projects was the flexibility of allowing appropriate design changes during implementation. Most projects reviewed had modified their project scope in response to actual site conditions and implementation challenges. Project reformulation facilitated and improved project implementation. For instance, the Pulangi River Irrigation Project in the Philippines adopted a process approach that allowed flexibility in project implementation. Making changes in project designs during implementation that contribute to achieving good project outcomes was an important contribution made by project administration staff associated with successful projects.

14. Since many ID projects are undertaken in remote areas, effective quality control systems for civil works and internal and external audit systems must be in place. Water user associations can be trained to help monitor progress in implementation and the quality of civil works.

15. In successful projects, continuous attention was paid during implementation to build the systems needed for O&M. OED findings in Nepal pointed to the critical need for commitment, ability, and leadership for sustainable O&M on the part of water user associations. Careful planning and institutional development are needed to build sustainable O&M systems.

G. Performance of the Executing Agency

16. A high level of commitment and involvement of the EAs in all phases of the project cycle is essential for project success. Based on the projects reviewed, the EAs exhibited project ownership by (i) establishing a project office near the actual project sites (site-based) to monitor project implementation and management, and, accordingly, to respond to immediate project concerns (Bangladesh and Pakistan); (ii) employing well-qualified staff, particularly project managers; (iii) selecting EA personnel involved in earlier projects (Pakistan); and (iv) financing a considerable share of project cost and assigning specific responsibilities to concerned agencies (Indonesia). The other qualities of EAs that may have contributed to good project performance were (i) the ability to address implementation problems; (ii) the quality of staffing, both technical competence and the number of staff involved in the project; (iii) the effective use of participatory techniques; and (iv) appropriate devolution of responsibilities to lower levels of government.

[8] This result is consistent with the findings of ADB. 2000. *Special Evaluation Study on Participatory Approaches in Forest and Water Resources Operations in Selected Developing Member Countries*. Manila.

[9] ADB. 2004. *Special Evaluation Study on Effectiveness of Participatory Approaches in Rural Development Projects*. Manila.

H. ADB's Contribution to Project Success

17. ADB allotted 142 and 147 person-days, respectively, for project processing and project administration of successful ID projects. Long-term ADB involvement in the ID sector and building up effective partnerships with EAs over a decade or more contributes to project success, policy reform, and the development of institutional capacity. A contribution of ADB to the success of ID projects reviewed was its proactive stance in solving problems and making required approvals. Fielding regular missions to address specific concerns facilitated this. ADB exercised flexibility by supporting project reformulation as necessary. The active involvement of resident missions in project implementation also contributed to the success of some projects. In one project in Bangladesh, ADB contributed value added to the project design through the installation of a benefit, monitoring, and evaluation system.

I. Exogenous Factors

18. Favorable prices and the absence of natural disasters are the primary exogenous factors that influenced project success. Generally, increased access to irrigation facilitated multiple cropping and allowed farmers to shift to high-yielding crops, which translated to higher returns. For instance, the good price of cotton at the time of project implementation in Pakistan provided an incentive for farmers to intensify cotton production and utilize irrigation facilities efficiently. Likewise, favorable prices for secondary crops enabled Indonesian farmers to adjust their crop calendars and raise secondary crops. The absence of natural disasters facilitated the continuity of project operations and avoided possible damage to existing infrastructure.

J. Counterfactual in the Irrigation and Drainage Sector

19. Comparing some key indicators for successful ID projects with those for partly successful/unsuccessful projects provides some insights into the counterfactual case in this sector (see Table A8). There were clear differences in the average ex-ante and ex-post EIRRs for the two groups of projects. The ex-ante EIRRs for ID projects that turned out to be successful were high, averaging 32%. The corresponding figure for projects that were not rated as successful was about half of this figure (18%). The average ex-post EIRRs were considerably lower for both groups—18% for the successful projects and 6.8% for the partly successful/unsuccessful projects. The ex-post EIRRs for successful projects were clearly acceptable, bordering on highly efficient and well above ADB's 12% estimated economic cost of capital.

20. Project size does not appear to be a key driver of successful ID projects. On average, the successful projects cost $44.7 million, slightly less (about $10 million) than the less successful ID projects. This may suggest that smaller projects are more likely to be successful than larger projects, but the evidence is not strong. Cost overruns were experienced for both the successful (38%) and partly successful/unsuccessful (21%) ID projects. Cost overruns were a particular problem in unsuccessful projects, for which they averaged 68%. The successful projects found ways to manage cost overruns so that project outcomes were not compromised.

Table A8: Characteristics of Successful Irrigation and Drainage Projects

Item	Generally Successful or Successful		Partly Successful or Unsuccessful		Total	
	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average
Project Characteristics						
Size of Project ($ million)	21	44.7	16	56.5	37	49.8
Economic Internal Rate of Return at Appraisal (%)	20	32.0	15	18.0	35	25.9
Economic Internal Rate of Return at Postevaluation (%)	20	18.0	10	6.8	30	14.0
Planned Implementation Period (years)	21	4.7	16	5.1	37	4.8
Actual Implementation Period (years)	20	7.3	16	9.6	36	8.3
Implementation Delay (years)	20	2.7	16	4.5	36	3.5
Cost Deviation (%)						
Cost Overrun (%)	21	38.3	16	21.2	37	30.7
Cost Underrun (%)						
ADB Inputs						
Project Processing Missions	20	2.3	15	2.0	35	2.2
Project Processing Person-Days	20	141.8	15	159.7	35	151.1
Project Administration Missions during Implementation	20	11.3	15	12.9	35	12.0
Project Administration Missions per Year of Implementation	20	1.5	15	1.3	35	1.4
Project Administration Person-Days during Implementation	20	146.9	15	211.8	35	174.7
Project Administration Person-Days per Year of Implementation	20	20.1	15	22.1	35	21.0

ADB = Asian Development Bank.

Notes:

"Average" refers to simple mean (i.e., unweighted).

Project size refers to the actual cost of the project, which includes funding from ADB, the government, and other sources.

Implementation period refers to the length of time taken to implement a project (from original date of effectiveness to completion).

Implementation delay is the difference between planned and actual implementation period.

Processing missions comprise fact-finding and appraisal missions.

Administration missions are supervision missions carried out from inception to project completion, excluding PCR missions.

Sources: Project completion reports and project performance evaluation reports of irrigation and drainage containing a rating circulated as of 31 December 2005.

21. Changes in project scope affect the implementation period. Nonetheless, given that most of the design changes in successful ID projects were geared towards improving project performance, implementation delays did not affect overall project quality. While time overruns were common for successful ID projects, they fared better relative to unsuccessful projects. The average implementation delay for successful projects was only 2.7 years, in contrast with the 8-year and 4-year average delays for unsuccessful and partly successful projects, respectively.

22. ADB staff inputs varied somewhat between the two groups of projects. Processing the unsuccessful and partly successful projects required more staff time (an average of 160 person-days) than did successful projects (142 person-days). This may indicate that ADB staff realized that there were risks associated with the projects that were ultimately not rated successful and tried to compensate by devoting more staff time. Significantly more staff resources were devoted to the administration of the partly successful/ unsuccessful projects (an average of 212 days over the life of the project) than to successful projects (147 days). However, when these figures are adjusted to reflect the number of years that the projects were under implementation, there was not a significant difference in the average number of days spent on review missions per year, about 21. Thus, ADB does not appear to allocate more intensive staff resources to ID projects that turn out to be less successful than expected.

23. A review of the PPERs and PCRs of partly successful and unsuccessful ID projects identified a number of factors that typically contributed to disappointing project performance:

(i) **Inadequate project design.** Quality at entry was a problem. ID projects are, by nature, complex and difficult to prepare, implement, and evaluate. The projects are people-centered and, because of the importance of local conditions, solutions that work in one country may not work in another. In some cases technical problems contributed to less than successful outcomes. For example, in some less than successful irrigation projects the command area serviced by the project was considerably smaller than anticipated. In other cases the quality of economic analysis on which project approval was based was suspect. Unrealistic assumptions were made, and the project benefits were sometimes significantly overestimated.

(ii) **Project complexity.** Many projects that experienced difficulty covered large areas, had multiple components, and involved several institutions.

(iii) **Complex institutional structure involving weak institutions.** Many organizations are involved in agriculture and rural development in all countries. Institutional weaknesses were particularly evident at the local level. Problems included human resource weaknesses and limited budgets.

(iv) **Inadequate beneficiary consultation during the design phase.** Poor community consultation/involvement during the initial stages of designing less than successful projects led to inadequate O&M, thereby contributing to ineffective water user associations and nonpayment of irrigation service fees.

(v) **Ineffective water user associations.** Effective water user associations were often not developed for projects that were rated as partly successful or unsuccessful. Participatory processes were not effectively used to strengthen project design, implementation, and operations or to develop effective water user associations.

(vi) **Poor O&M.** Often the less than successful ID projects were not effectively operated and maintained, thus reducing the sustainability of benefits. Problems in this area included lack of funds for O&M and poor revenue collection from beneficiaries.

(vii) **Inadequate ADB supervision.** The "blueprint" approach to project design is not always appropriate for ID projects. A process approach is often needed, with the flexibility to adapt project design to incorporate lessons learned during implementation. The process approach requires strong project administration. In addition to undertaking a sufficient number of missions, the quality of supervision is also important. ADB staff must be able to identify and work proactively to solve problems.

(viii) **Adverse impact of external factors.** During most of the 1980s and 1990s, farm-gate market prices for primary commodities generally fell, adversely affecting the outcomes of some projects. Some ID projects were adversely affected by drought and a lack of water.

K. Summary

24. Box A8 summarizes the characteristics of successful ID projects.

Box A8: Characteristics of Successful Irrigation and Drainage Projects

1. Elements of an enabling environment that allowed farmers to supply the demand for their produce included (i) a policy and institutional framework that promotes sound water resource management; (ii) a legal framework for water user associations that promotes cost recovery at least sufficient to finance sustainable O&M; (iii) rural infrastructure (e.g., roads that allow farmers to market their products, and farm inputs to be delivered when they are needed); (iv) efficient markets that are free of price distortions and barriers to competition for both farm products and agricultural inputs; and (v) access to information on demand, prices, and technology.
2. Long-term ADB involvement in the sector and building up effective partnerships with EAs over a decade or more contributes to project success, policy reform, and the development of institutional capacity.
3. Indicators of project ownership by EAs include (i) establishing site-based project offices; (ii) well-qualified staff; (iii) selecting EA personnel involved in earlier projects; and (iv) financing a considerable share of project cost.
4. Good quality at entry reflected the quality of the feasibility study and project design, incorporation of lessons from prior projects, and the level of stakeholder participation.
5. Direct stakeholders and beneficiaries were involved in all project phases, particularly O&M. Participatory techniques were used to develop a sound understanding of the roles and responsibilities of farmers and water user associations and to create a climate in which participants were willing to pay irrigation fees.
6. Adequate water supply reached tail-end users, which are usually small farmers.
7. Making changes in project designs during implementation contributed to achieving good project outcomes.
8. Effective quality control systems for civil works and internal and external audit systems were in place, even in remote areas.
9. During implementation, continuous attention was paid to building the systems needed for effective O&M.
10. Effective ADB project administration includes regular review missions, proactively helping to solve problems and making required approvals in a timely manner.

Source: OED.

CHARACTERISTICS OF SUCCESSFUL PROJECTS APPROVED FROM 1970 TO 1997 by Source of Funds

Item	Highly Successful		Generally Successful or Successful		Partly Successful		Total	
	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average	No. of Projects	Average
A. ADF-Funded Evaluated Projects								
Project Characteristics								
Size of Project ($ million)	18	109.3	280	61.6	216	74.4	514	68.6
Economic Internal Rate of Return at Appraisal (%)	12	18.1	184	22.8	117	22.8	313	22.6
Economic Internal Rate of Return at Postevaluation (%)	4	31.1	101	17.4	54	7.0	159	14.2
Planned Implementation Period (years)	18	4.5	280	4.3	216	4.5	514	4.4
Actual Implementation Period (years)	18	5.4	280	6.7	216	7.3	514	6.9
Implementation Delay (years)	18	1.0	280	2.5	216	2.8	514	2.6
Cost Deviation (%)	18	3.3	277	5.3	211	(5.8)	506	0.6
Cost Overrun (%)	7	27.2	117	38.4	67	40.2	191	38.6
Cost Underrun (%)	11	(11.9)	160	(19.0)	144	(27.2)	315	(22.5)
ADB Inputs								
Project Processing Missions	16	2.0	256	2.0	199	1.8	471	1.9
Project Processing Person-Days	16	76.5	256	111.0	198	121.5	470	114.3
Project Administration Missions during Implementation	18	8.8	274	10.8	214	11.9	506	11.2
Project Administration Missions per Year of Implementation	18	1.7	274	1.6	214	1.7	506	1.7
Project Administration Person-Days during Implementation	18	99.8	274	128.7	214	169.7	506	145.0
Project Administration Person-Days per Year of Implementation	18	18.4	274	19.0	214	23.8	506	21.0
B. OCR-Funded Evaluated Projects								
Project Characteristics								
Size of Project ($ million)	22	315.6	303	143.5	141	95.8	466	137.2
Economic Internal Rate of Return at Appraisal (%)	17	21.3	206	22.4	89	20.7	312	21.9
Economic Internal Rate of Return at Postevaluation (%)	5	22.4	114	20.5	34	4.8	153	17.1
Planned Implementation Period (years)	22	4.3	303	4.1	141	4.5	466	4.2
Actual Implementation Period (years)	22	5.2	303	6.0	141	7.2	466	6.3
Implementation Delay (years)	22	1.0	303	1.9	141	2.7	466	2.1
Cost Deviation (%)	21	(15.8)	295	(4.8)	138	(14.0)	454	(8.1)
Cost Overrun (%)	4	31.8	85	42.1	39	40.1	128	41.2
Cost Underrun (%)	17	(27.0)	210	(23.8)	99	(35.2)	326	(27.4)
ADB Inputs								
Project Processing Missions	22	2.1	286	1.9	134	1.9	442	1.9
Project Processing Person-Days	22	143.5	286	121.0	134	132.1	442	125.5
Project Administration Missions during Implementation	22	7.9	297	8.3	139	9.6	458	8.7
Project Administration Missions per Year of Implementation	22	1.5	297	1.4	139	1.4	458	1.4
Project Administration Person-Days during Implementation	22	77.3	297	87.1	139	123.2	458	97.6
Project Administration Person-Days per Year of Implementation	22	14.7	297	14.7	139	17.3	458	15.5

ADB = Asian Development Bank, ADF = Asian Development Fund, OCR = ordinary capital resources.

Notes:

"Average" refers to simple mean (i.e. unweighted)

Project size refers to the actual cost of the project which includes funding from ADB, government, and other sources.

Implementation period refers to the length of time taken to implement a project (from original date of effectiveness to completion).

Implementation delay is the difference between planned and actual implementation period.

Processing missions comprise fact finding and appraisal missions.

Administration missions are supervision missions carried out from inception to project completion, excluding PCR missions.

Sources: Project completion reports and project performance evaluation reports containing a rating circulated as of 31 December 2005.

GOVERNANCE AND PROJECT SUCCESS

Table A10.1: Relationship between Governance and Project Success

Item	Success Rate at Country Level		Project Level Logit Regression	
	Correlation Coefficient		With Social Infrastructure	With Social Infrastructure Segregated
	With Outliers	Without Outliers	Coefficient	Coefficient
Voice and Accountability	-0.54 ***	0.18	-0.39 **	ns
Political Stability	0.56 ***	0.48 **	0.34 **	0.42 **
Government Effectiveness	0.41 **	0.45 **	ns	ns
Regulatory Quality	0.37 **	0.35 *	ns	ns
Rule of Law	0.24	0.34 *	ns	ns
Control of Corruption	0.33 *	0.41 **	ns	ns
Dummy Variables for				
Agriculture			ns	ns
Energy			1.40 **	1.35 **
Finance			ns	ns
Social Infrastructure			0.67 **	
Education and Health				ns
Water Supply and Urban Development				ns
Transport and Communications			1.43 **	1.44 **
Intercept			0.32	0.58

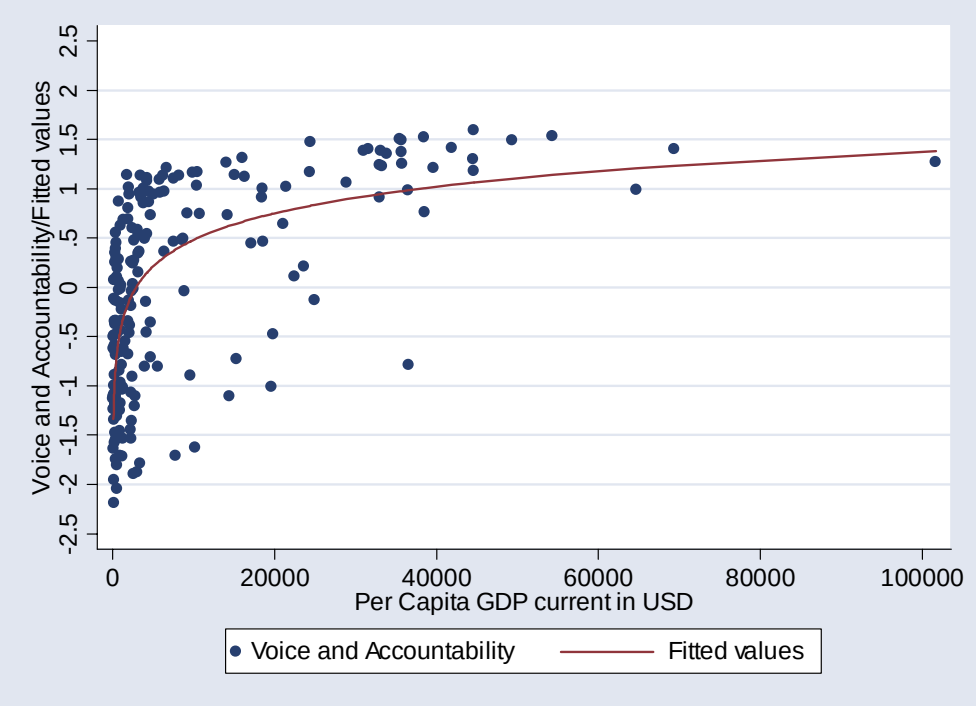
ns = not significant.

Notes:

Outliers include Bhutan, Kiribati, Maldives, Marshall Islands, Viet Nam.

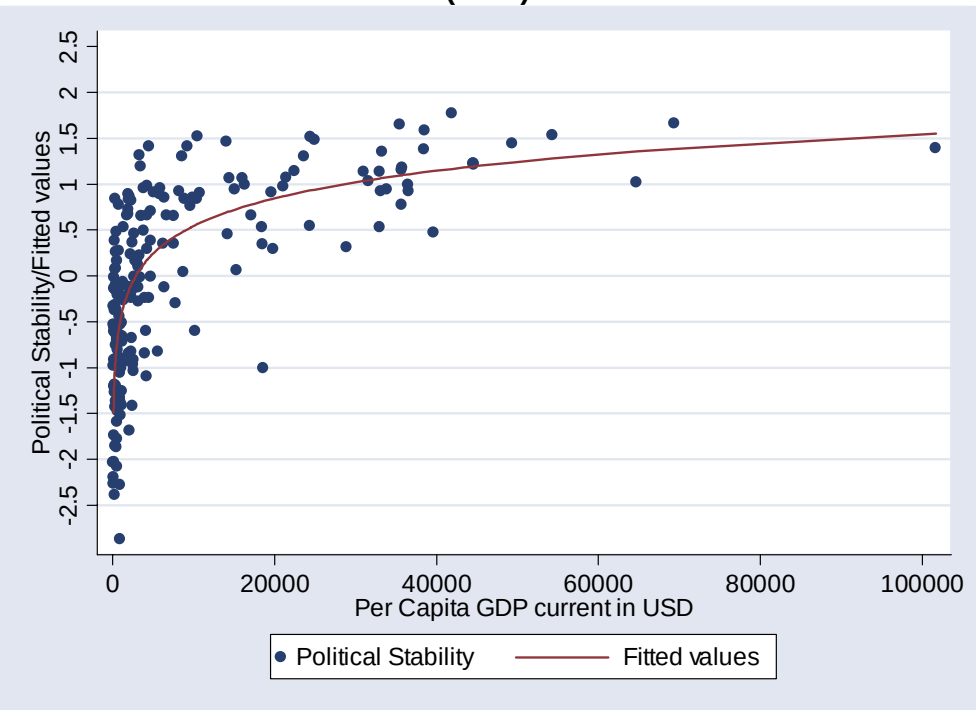
Significance levels: ***=1%, **=5%, * = 10%.

Figure A10.1: Worldwide Relationship Between Voice and Accountability and GDP Per Capita (2004)



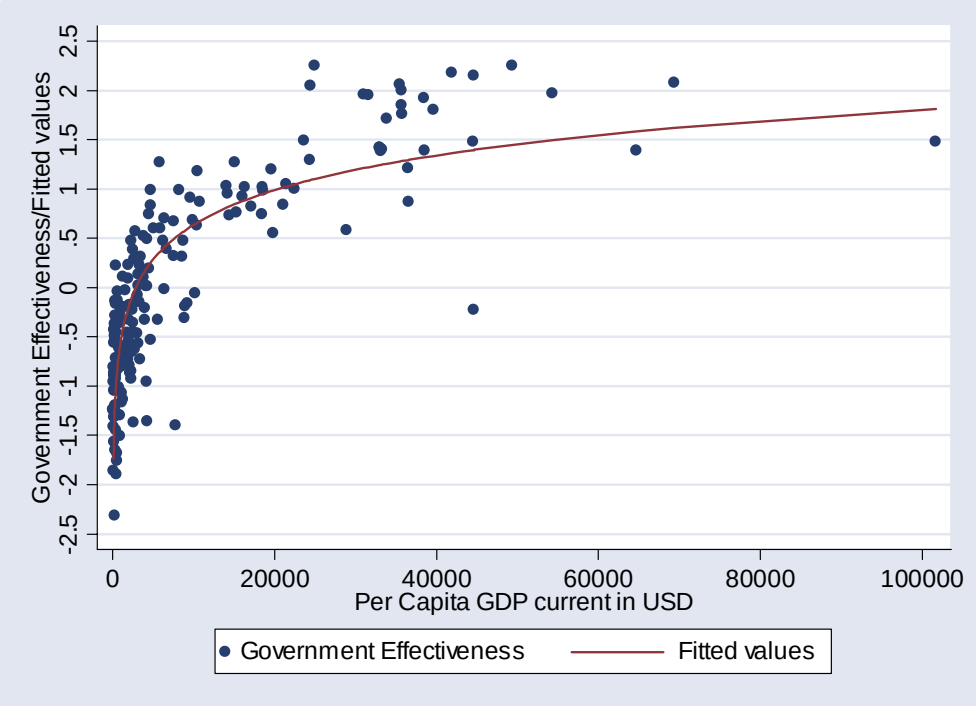
Correlation: 0.6507*

Figure A10.2: Worldwide Relationship Between Political Stability and GDP Per Capita (2004)



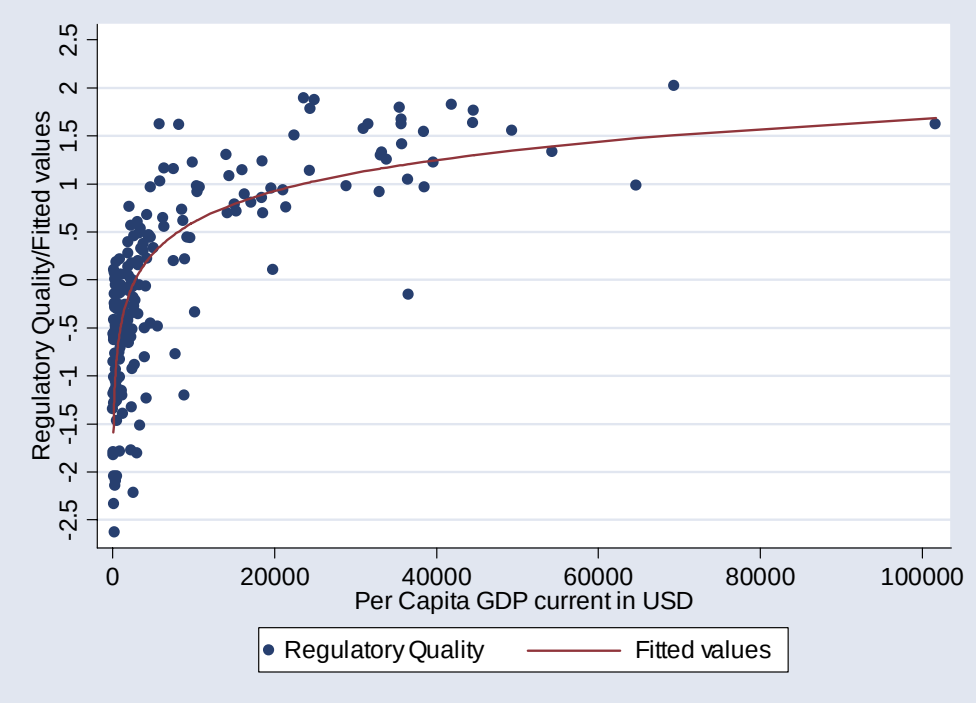
Correlation: 0.7312*

Figure A10.3: Worldwide Relationship Between Government Effectiveness and GDP Per Capita (2004)



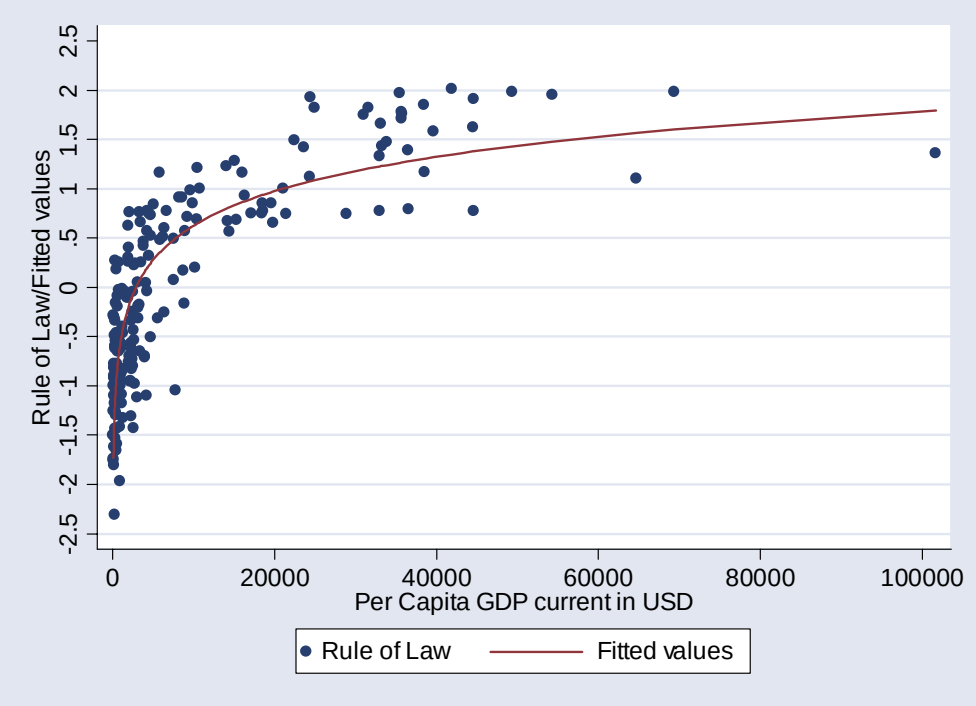
Correlation: 0.8501*

Figure A10.4: Worldwide Relationship Between Regulatory Quality and GDP Per Capita (2004)



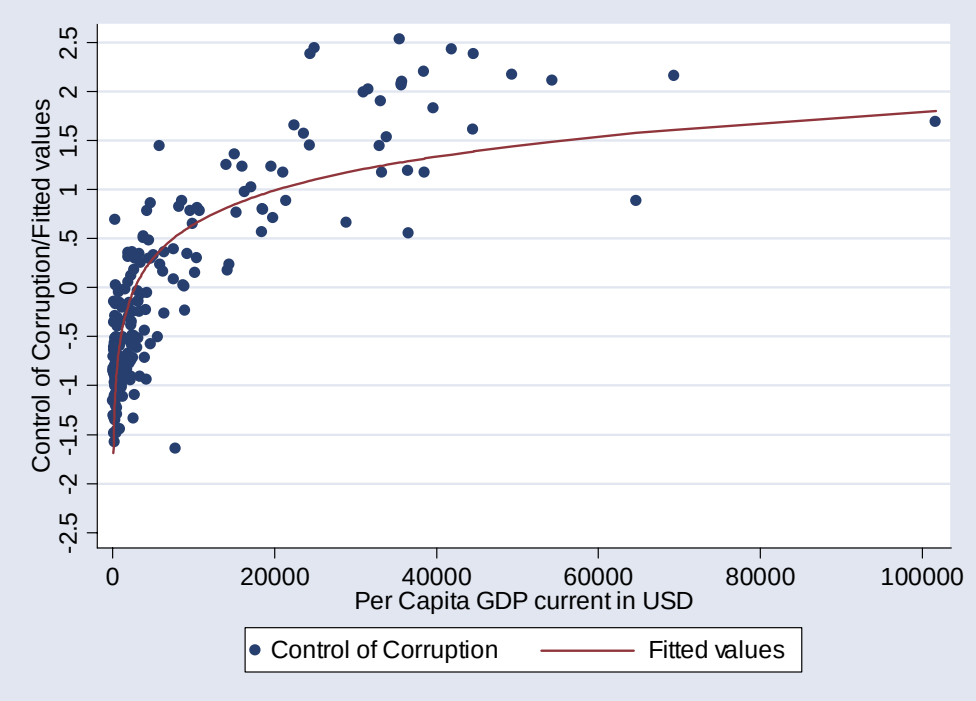
Correlation: 0.7833*

Figure A10.5: Worldwide Relationship Between Rule of Law and GDP Per Capita (2004)



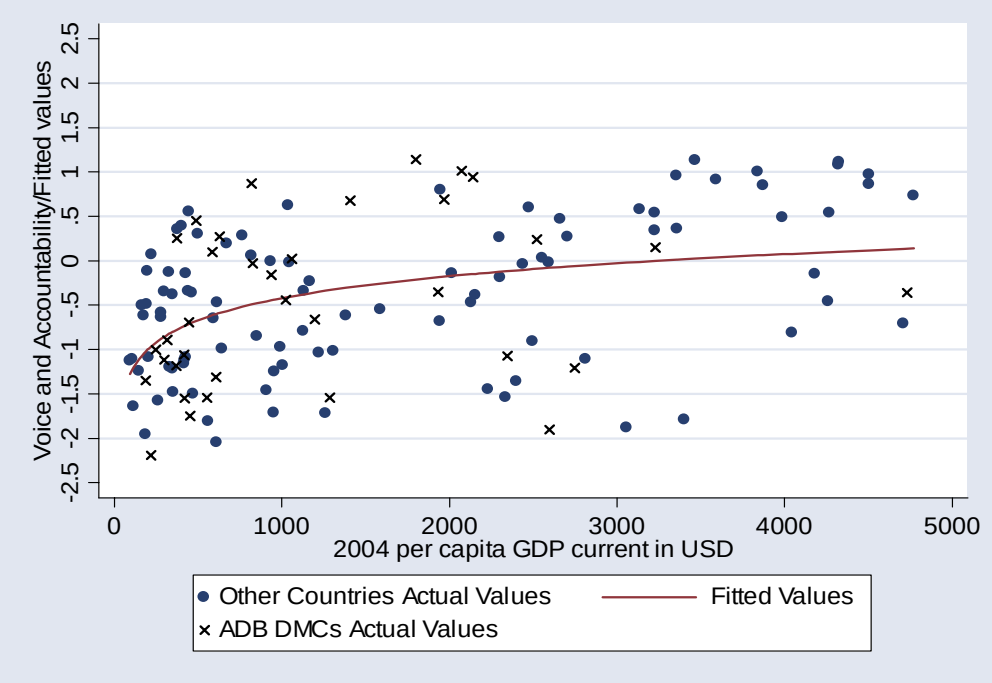
Correlation: 0.8476*

Figure A10.6: Worldwide Relationship Between Control of Corruption and GDP Per Capita (2004)



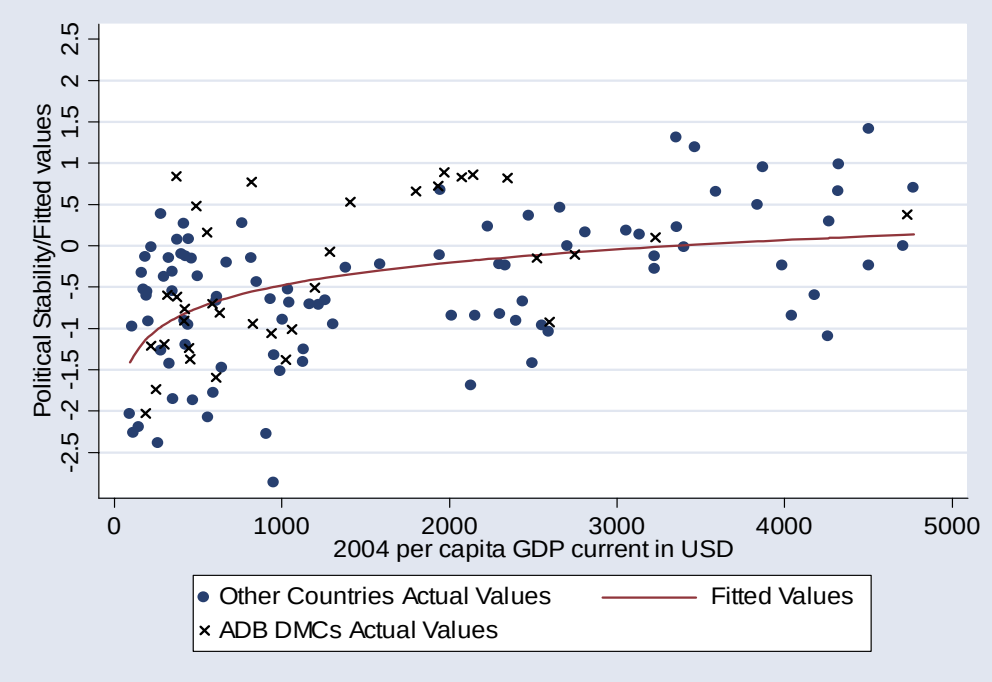
Correlation: 0.8314*

Figure A10.7: Relationship Between Voice and Accountability and GNP Per Capita for DMCs (2004)



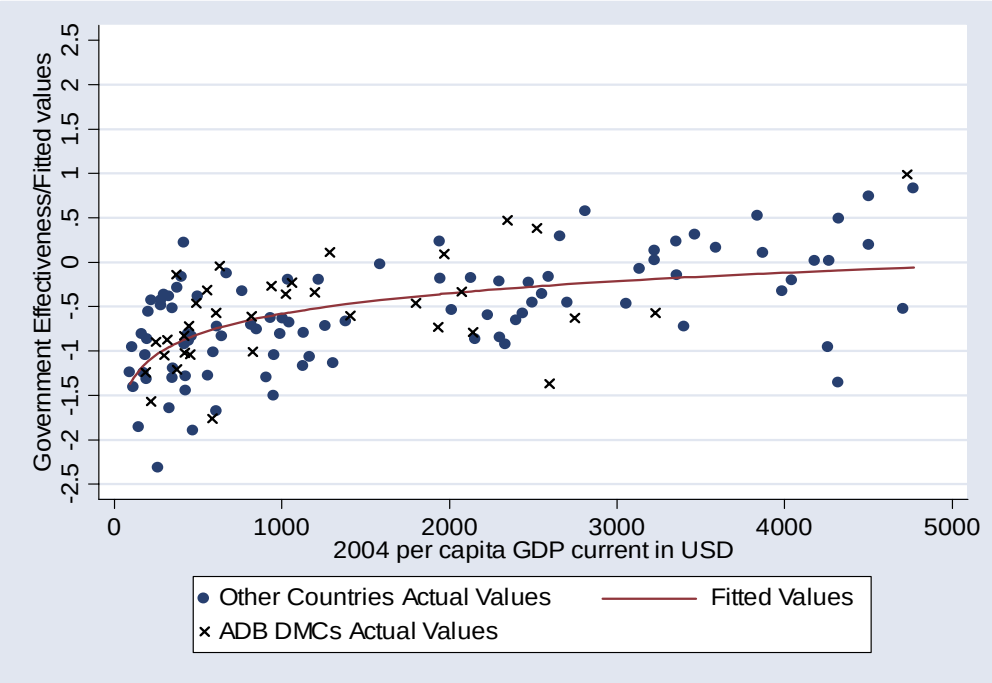
Correlation: 0.4311*

Figure A10.8: Relationship Between Political Stability and GNP Per Capita for DMCs (2004)



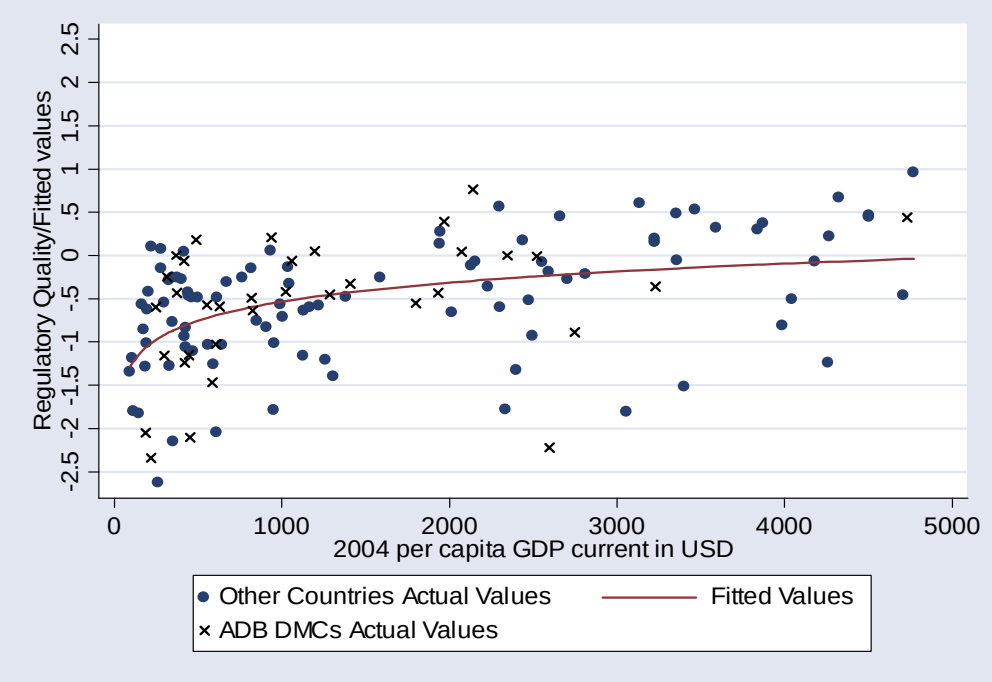
Correlation: 0.4728*

Figure A10.9: Relationship Between Government Effectiveness and GNP Per Capita for DMCs (2004)



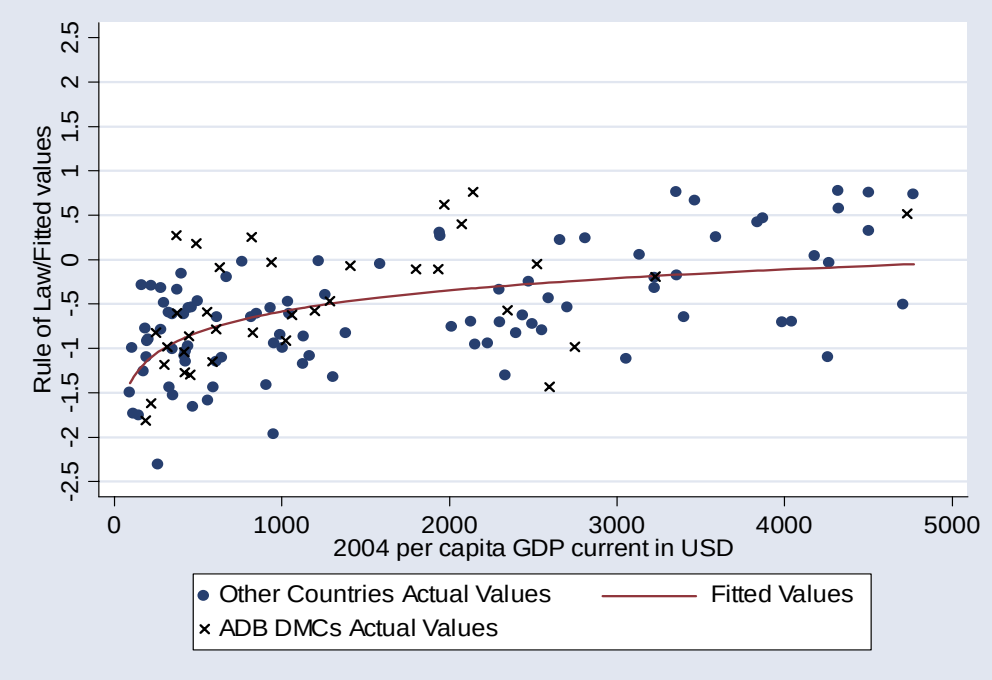
Correlation: 0.5788*

Figure A10.10: Relationship Between Regulatory Quality and GNP Per Capita for DMCs (2004)



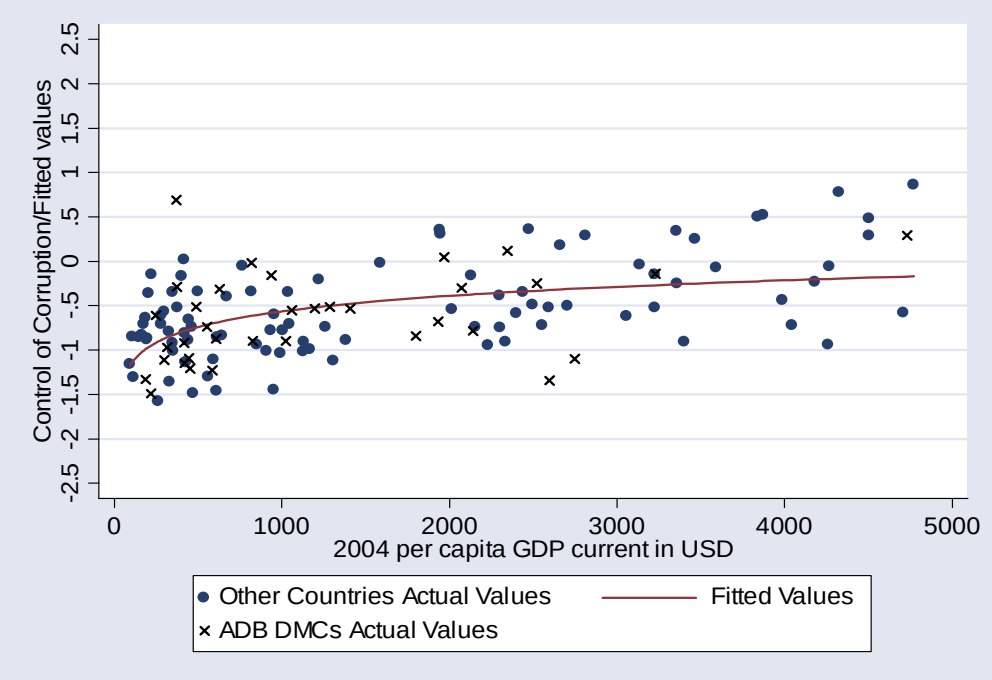
Correlation: 0.4557*

Figure A10.11: Relationship Between Rule of Law and GNP Per Capita for DMCs (2004)



Correlation: 0.5465*

Figure A10.12: Relationship Between Control of Corruption and GNP Per Capita for DMCs (2004)



Correlation: 0.5002*

Table A10.2: Correlation of KKZ Governance Components (Average 1996/98/00/02/04) With GDP Growth Rate (Average 1996-2004) Using Worldwide Data (183 Countries)

	Correlation Coefficients
Voice and Accountability	-0.2568*
Political Stability	-0.0436
Government Effectiveness	-0.0073
Regulatory Quality	-0.0526
Rule of Law	-0.0965
Control of Corruption	-0.0704
Governance Index	-0.0967

* Significant at 1% level; others not significant even at 10% level

Figure A10.13: Scatter Plot: Average GDP Growth Rate and Average Governance Index 1996-2004

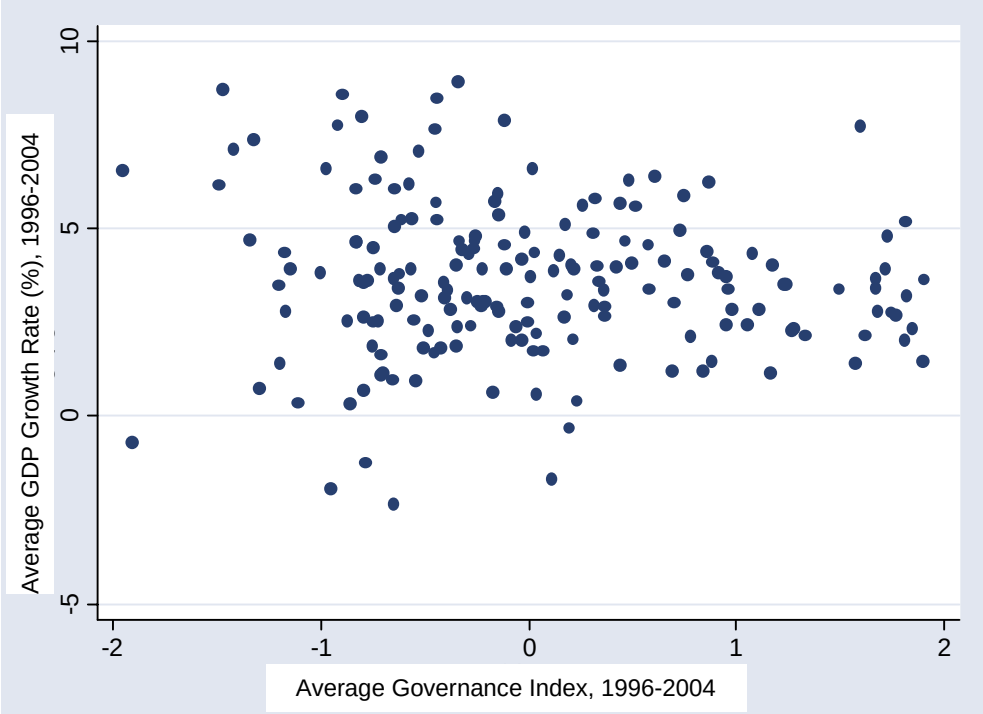
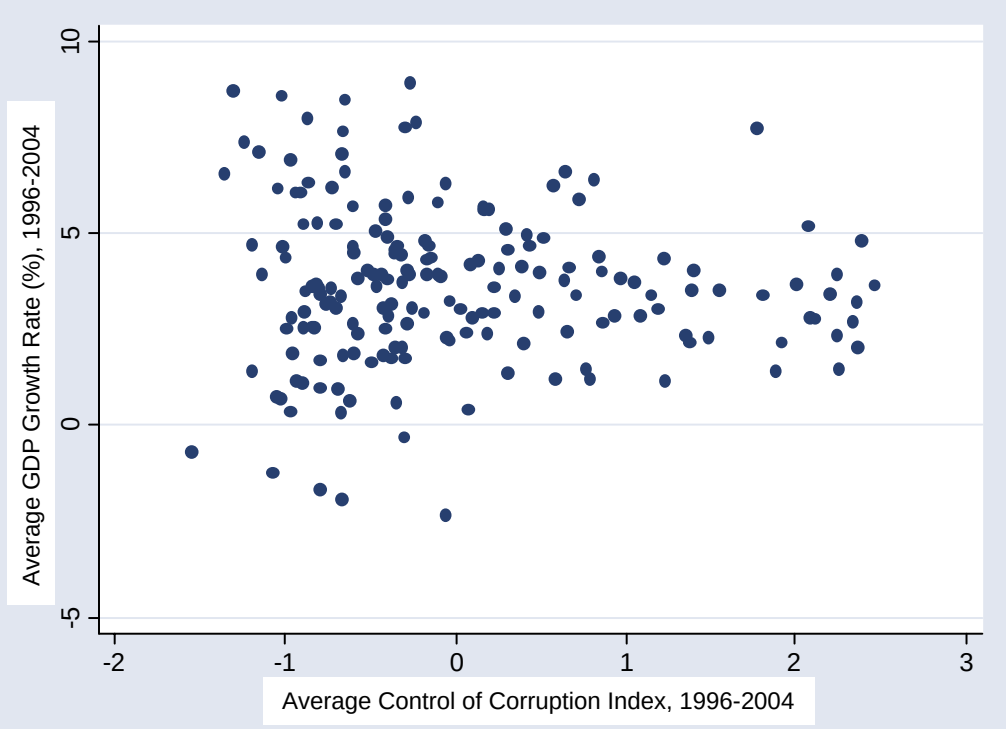


Figure A10.14: Scatter Plot: Average GDP Growth Rate and Control of Corruption Index 1996-2004



ASSESSMENT OF FACTORS IMPACTING ON PROJECT SUCCESS

A. Introduction

1. Project success depends on many factors. Some are internal to the Asian Development Bank (ADB), some are within the control of developing member countries (DMCs), and some are beyond the control of ADB and/or DMCs. Econometric techniques, descriptive statistics, and qualitative assessments can help to better understand how various factors impact on project success and to explore causal relationships among and between the variables. These approaches complement each other. The purpose of the econometric analysis carried out for this report is to help identify those factors that appear to be the most important determinants of project success.

B. Logit Analytical Framework

2. Logistic regression (also called logit analysis) is a form of regression that allows one to predict an estimate of the probability that an event will occur or not from a set of independent variables that may be continuous, discrete, dichotomous, or a mix of any of these. It makes no assumption about the distribution of the independent variables; that is, they do not have to be normally distributed, linearly related, or of equal variance within each group. Generally, the dependent or response variable is dichotomous—it can take the value 1 with a probability of success ρ, or the value of 0 with a probability of failure 1- ρ. The logistic regression model yields ordinary least square regression (OLS)-like coefficients that indicate the relative impact of each predictor variable. A positive coefficient increases the probability, whereas a negative coefficient decreases the predicted probability. The form of a logistic regression equation is:

$$\mathbf{ln}\left(\frac{\boldsymbol{\rho}}{\mathbf{1}-\boldsymbol{\rho}}\right) = \boldsymbol{\alpha} + \boldsymbol{\beta}\mathbf{x} + \mathbf{e}$$

where:

- **ln** is the natural logarithm, $\log_{exp}$, where exp = 2.71828…
- **ρ** is the probability that the event Y occurs, P(Y=1)
- **ρ/(1 – ρ)** is the "odds ratio"
- **ln[ρ/(1 – ρ)]** is the log-odds ratio, or "logit"
- **α** is the constant (intercept) of the equation
- $\boldsymbol{\beta}_i$ is the coefficient of predictable variable $\mathbf{x}_i$; interpreted as increase in log-odds for a one unit increase in $\mathbf{x}_i$ with all other $\mathbf{x}_i$s constant
- **e** is the error estimate

3. In this report, the dependent variable is defined by whether the project performance evaluation report (PPER) or the project completion report (PCR) rated the project as successful or not. This variable has only two possible values: 1 if the project is rated as successful and 0 if it is rated as partly successful or unsuccessful. The definition of project success is based on the Operations Evaluation Department (OED) *Guidelines*. A project is rated "successful" based on an assessment of its (i) relevance, (ii) effectiveness, (iii) efficiency, and (iv) sustainability.

4. A large number of potential variables could be used as independent or predictor variables. These variables are grouped into several categories: (i) sector: the sector in which the project takes place; (ii) country: country characteristics such as the macroeconomic climate,

country name and classification, and governance scores; (iii) ADB inputs: mission leader characteristics, mission days during project processing and project administration, type and percent of financing; and (iv) exogenous factors such as time. The full list of variables considered is given in Table A11.1.

Table A11.1: Independent Variables Considered in the Logistic Regression Model

Project Characteristics
Project Implementation Delay (years)
Cost Variation
Number of Days to Effectivity
Project with a Delay in Loan Effectivity
ADB Inputs
Project Processing Person Mission-Days
Project Administration Person Mission-Days during Implementation
Project Administration Person Mission-Days per Year of Implementation
Characteristics of Mission Leader (ML) [a]
Age of ML during Project Approval
Specialization (technical specialist, project economist, financial analyst, engineer, etc)
ML Promoted 2 Years before/after Project Approval
Number of Core Members
Economic Climate
Average GDP Growth Rate during Project Implementation
Average GDP Growth Rate during Project Implementation and the First 5 Years of Operations
Governance
Voice and Accountability
Political Stability
Government Effectiveness
Regulatory Quality
Rule of Law
Control of Corruption
Poor Performing Countries (BAN/PNG/PHI/SRI/)[c]
Sector
Agriculture
Energy
Finance
Industry
Multisector
Social Infrastructure
Transport and Communications
Time[c]
Decade: 1970s; 1980s;1990s
Set of Five years
Funding
ADF as Source of Funds
Growth/Decline of ADB Lending in Terms of Volume and Amount[c]

ADB = Asian Development Bank, ADF = Asia Development Fund, BAN = Bangladesh, GDP = gross domestic product, ML = mission leader, PNG = Papua New Guinea, PHI = Philippines, SRI = Sri Lanka.

[a] Included in the initial run of the regression model but excluded in the final run of the model due to missing values.

[b] Considered as independent variables for projects approved in the 1990s, as data were available only for the years 1996, 1998, 2000, and 2002.

[c] Considered during the early exploratory phase of model creation and found to be not significant.

5. Despite the large number of variables considered, it should be noted that many other factors may influence project success. A partial list would include DMC inputs—e.g., project ownership, sectoral policies/roadmaps, the demand for project outputs, institutional capacity at the sector level and project level, project management, and timely provision of counterpart funds. There are also exogenous variables such as international commodity prices, financial market behaviors, natural disasters, and public health outbreaks. A more elaborate model would consider these variables if the required data were available.

C. Sources of Data and Limitations

6. For the analysis of project performance, a data base was developed composed of data compiled from various sources. Project success rates were sourced from the evaluation information system, the OED data base system that stores data from circulated PPERs and PCRs.

7. The data base on mission leaders (MLs) was created by extracting the names of MLs and mission members for each project from the respective report and recommendation of the President (RRP)/appraisal report. Information on the characteristics of MLs and mission members was extracted from ADB's human resource management data base known as K20. ADB inputs during processing and administration were also obtained from the projects' RRPs/appraisal reports.

8. The governance indicators were taken from the World Bank Policy Research Department Working Paper by Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi (2003), entitled "Governance Matters III: Governance Indicators for 1996-2002." Other macroeconomic data such as gross domestic product (GDP) per capita and GDP growth rate were both sourced from the United Nations Statistics Database - National Accounts Main Aggregates Database.

9. Measures were considered to ensure that the data were consistent for all years and countries for the different data sets coming from different sources. The variables used to merge the data sets included country name, loan number, or employee number for project data sets. After each merging process, the combined data sets were verified to check for missing data. Further corrections were made to ensure that most, if not all, of the data could be considered in the study.

10. One data limitation was the consistency of reference years among the data sets. The governance data from the World Bank were available only for 1996, 1998, 2000, and 2002. When these data sets were merged by country and year with project characteristics, only a small portion of the projects were properly matched, leaving out other projects approved/rated in the 1970s and 1980s. With this limitation, only projects approved/rated in the 1990s were employed when governance indicators were added in the analysis. Another constraint was on the absence of unique variables that could be used to merge the rated project data set and ML characteristics data base. The ML's name was the only common variable for both, making it tedious to properly match the two data sets.

D. Summary of the Model Runs and Estimated Predictor Values

11. The purpose of this exercise was to create a model that includes a large number of variables that are useful in examining the factors that relate to project success. However, the process of this model creation was exploratory in nature and as such made no a priori

assumptions regarding the relationships between the variables. The intent was to discover relationships and not theory testing, which is testing of a priori theories or hypotheses of the relationships between variables.

12. Stepwise regression was the method used during the exploratory phase of model creation, where the analysis began with a full or saturated model and independent variables were eliminated from the model in an iterative process. This was to obtain a model that could reasonably predict the likely relationship between the dependent variable and independent variables. The final model that resulted from the stepwise regression is given in Table A11.2. Three levels of significance (1%, 5%, and 10%) were used in the analysis. Most of the predictor variables that were significant at 5% were also significant at 1%. There were no additional significant variables at the 10% significance level.

Table A11.2: Logit Regression Results for Approved Evaluated Projects from 1970–1997

	Logit Coefficients				Odds Ratio[a]			
Significant Variables	1970s	1980s	1990s	Total	1970s	1980s	1990s	Total
Implementation Delays		-0.47 ***	-0.26 ***	-0.26 ***		0.6	0.8	0.8
Cost Variation		0.02 ***	0.02 **	0.004 **		1.0	1.0	1.0
Number of Project Administration Person-Days	-0.01 ***	0.01 ***			1.0	1.0		
Project Administration Person-Days per Year of Implementation		-0.10 ***	-0.04 ***	-0.03 ***		0.9	1.0	1.0
Average GDP Growth Rate during Project Implementation and the First 5 Years of Operations .	0.30 ***	0.25 ***		0.17 ***	1.3	1.3		1.2
Sector dummies:								
Agriculture				0.66 **				1.9
Energy	1.36 ***	2.30 ***	1.92 ***	2.18 ***	3.9	10.0	6.8	8.9
Industry				1.15 **				3.1
Multisector			1.46 **	1.92 ***			4.3	6.8
Social Infrastructure			1.11 **	1.18 ***			3.0	3.2
Transport and Communications	2.22 ***	1.58 ***	2.04 ***	2.40 ***	9.2	4.8	7.7	11.0
Governance Components								
Voice and Accountability			-0.65 **				0.5	
Regulatory Quality			0.78 **				2.2	
Constant	-1.06	0.08	1.35	-0.53				
No. of Observations	216	295	304	827				
LR chi^2	65.63	68.78	72.34	178.37				
Prob > chi^2	0.00	0.00	0.00	0.00				
Pseudo R^2	0.22	0.17	0.20	0.16				
Area under ROC Curve	0.80	0.77	0.79	0.76				

Significance Levels:1%=***; 5%=**.

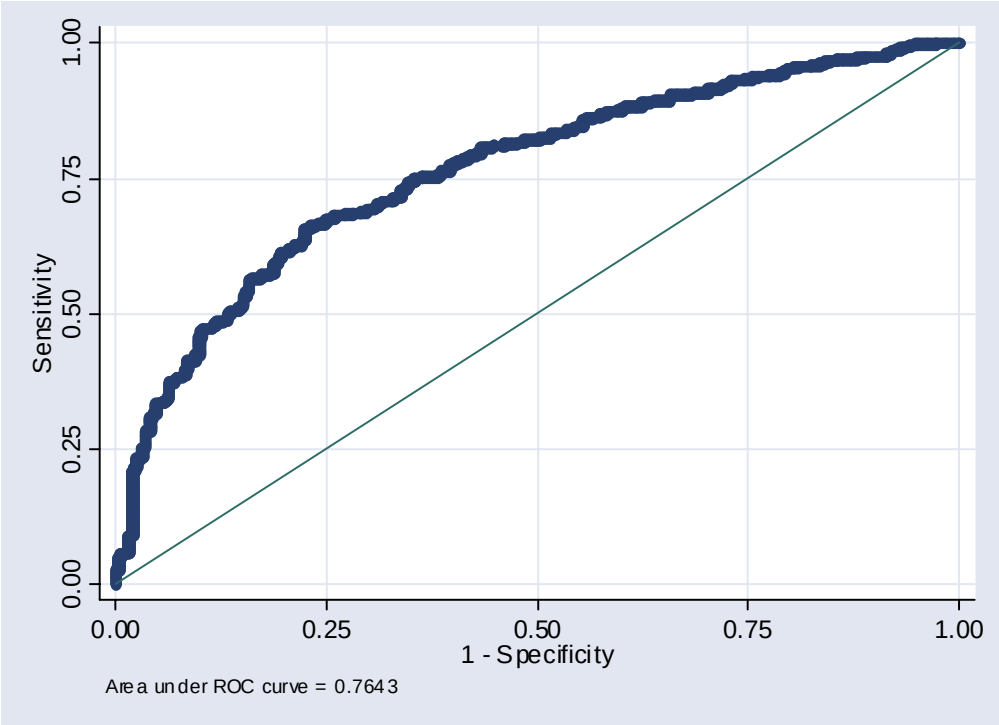
[a] The odds ratio (exponential of a logit coefficient) describes the proportionate rate at which the the odds of the outcome changes with each successive unit of X.

13. The final model indicates that sector and economic growth during implementation period and the first 5 years are the best determinants of project success, while implementation delays decrease the odds of a project being successful. Among sectors, the probability of the likelihood of success of projects in the energy and in the transport and communication sectors is higher than in agriculture projects, thus validating the qualitative assessments in this report. The analysis was extended by decade of approval. Because the governance indicators were available only from 1996 onward, they were included as additional explanatory variables in the model for projects approved in the 1990s. The results show that from the 1970s to the 1990s, economic growth and the energy and transport and communication sectors were consistent predictors of project success. Implementation delay was not a problem in 1970s but had a negative impact on the projects approved in the 1980s and 1990s. For projects approved in the

1990s, in addition to sector variables and economic growth, having a good regulatory quality increased the odds of a project being successful, but increased voice and accountability decreased the likelihood of project success. OED's concerns about the robustness of this finding are discussed in Chapter III.

14. The strength of a logistic regression model is measured by the area under the receiver operating characteristics (ROC) curve. The greater the predictive power, the more bowed the curve. A model with no predictive power has an area of 0.5. A perfect model has an area equal to 1. The areas under the ROC curves for the models in Table A11.2 range from 0.76 to 0.80. The ROC curve for the all-projects model at the 5% significance level is shown in Figure A11.

Figure A11: Receiver Operating Characteristics (ROC Curve)



Note: Sensitivity is the fraction of observed positive-outcome cases that are correctly classified.
Specificity is the fraction of observed negative-outcome cases that are correctly classified

15. Logistic regression analyses were also carried out in selected countries with an adequate number of rated projects. Initial runs of the model used for all projects showed results that are dominated by sector variables in explaining project success in most countries. To further explore the sensitivity of project success to other variables, sector variables were excluded from the model for each country. The following variables had the greatest impact on project success in those runs: implementation delays, cost variations, number of days to effectivity, number of project processing person mission-days and administration mission-days, number of project administration-days per year of implementation, and average GDP growth rate during implementation period and the first 5 years of operations. The results in selected countries are given in Table A11.3. Economic growth was a significant predictor of project success in Bangladesh and Philippines. Implementation delays decreased the probability of project success in the People's Republic of China, Pakistan, and the graduate economies. In the case of Indonesia, delays in loan effectiveness reduced the odds of the project being successful. The ROC ranged from 0.66 for Indonesia to 0.90 for the graduate economies.

Table A11.3: Logit Regression Results for Evaluated Projects in Selected Countries

Significant Variables	Evaluated Projects Approved from 1970 to 1997						1986 to 1997	1970-1989
	Logit Coefficient							
	Bangladesh	Indonesia	Nepal	Pakistan	Philippines	Sri Lanka	PRC	Graduated Economies
Implementation Delay (Years)				-0.29			-0.71	-1.30
Cost Variation				0.02				
Number of Days upon Effectivity		-0.01						
Project Processing Person-Days				-0.01				
Project Administration Person-Days		-0.01				-0.01		
Project Administration Person-Days per Year of Implementation	-0.13			-0.04				
Average GDP Growth Rate during Project Implementation and the First 5 Years of Operations	2.24		-1.43		1.41			
Constant	-6.64	2.16	6.55	3.23	-4.51	1.95	2.36	5.32
No. of Observations	64	128	54	98	81	45	55	48
LR chi^2	24.16	11.35	6.76	23.17	19.31	8.29	7.98	12.94
Prob > chi^2	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00
Pseudo R^2	0.29	0.07	0.09	0.17	0.17	0.13	0.14	0.36
Area under ROC Curve	0.84	0.66	0.70	0.78	0.75	0.72	0.73	0.90

GDP = gross domestic product, ROC = receiver operating characteristics.
Note: No significant variable for India.

CHARACTERISTICS OF MISSION LEADERS AND PROJECT SUCCESS

Table A12.1: Selected Characteristics of Mission Leaders and Mission Members of Projects Approved in 1985, 1995, and 2005

Characteristics	Year of Project Approval			Test of Significance of the Difference Between	
	1985	1995	2005	1985 and 1995	1995 and 2005
Mean Age of MLs and MMs					
ML	44.4	47.9	44.9	Significant at 5% level	Significant at 5% level
MM	40.8	44.1	44.0	Significant at 5% level	Not significant
Mean Years in ADB					
ML	5.7	8.6	7.8	Significant at 5% level	Not significant
MM	4.5	6.9	6.0	Significant at 5% level	Not significant
Mean Years of Relevant Experience before Joining ADB					
ML	13.4	17.1	13.6	Not significant	Not significant
MM	15.3	12.9	13.6	Not significant	Not significant
Mean Educational Attainment					
ML	2.3	2.1	2.3	Not significant	Not significant
MM	2.0	2.2	2.2	Not significant	Not significant
1-Bachelor/Diploma/Certificate, 2-Masters/Licentiate, 3-Doctoral/Post-doctoral					

ADB = Asian Development Bank, ML = mission leader, MM = mission member.

Table A12.2: Distribution of Mission Leaders by Age Group for Projects Approved in 1985, 1995, and 2005

Age Group	Number of Mission Leaders			Proportion (%)		
	1985	1995	2005	1985	1995	2005
Less than 40 years old	9	5	13	21.4	8.5	22.4
40-44	15	12	15	35.7	20.3	25.9
45-49	10	18	15	23.8	30.5	25.9
50-54	8	19	13	19.0	32.2	22.4
55 and above	0	5	2	0.0	8.5	3.4
Total	42	59	58	100.0	100.0	100.0

Table A12.3: Frequency Distribution of Mission Leaders by Professional Qualifications for Projects Approved in 1985, 1995, and 2005

Specialization	Number of Mission Leaders			Proportion (%)		
	1985	1995	2005	1985	1995	2005
Technical Specialist [a]	13	14	15	31.0	23.7	25.9
Project Economist	10	15	18	23.8	25.4	31.0
Financial Analyst	6	9	3	14.3	15.3	5.2
Engineer	13	17	13	31.0	28.8	22.4
Senior Staff	0	2	3	0.0	3.4	5.2
Others	0	2	6	0.0	3.4	10.3
Total	42	59	58	100.0	100.0	100.0

[a] Includes specialists in (a) agriculture, (b) education, (c) health, (d) urban development, (e) transport, (f) energy, (g) banking/finance/capital markets/agricultural credit, (h) project administration, (i) industry/SME/marketing, and (j) private sector/investments.

STATISTICAL SUMMARY OF FOLLOW-UP ACTIONS

Item	From 2004 OED Reports					From 2005 OED Reports					
	PPAR/TPAR		SES[b]	Total		PPER/TPER		SES		Total	
	Number[a]	%	Number	Number	%	Number[a]	%	Number	%	Number	%
Addressed to DMCs											
Specific to the Project	41	68.3	0	41	68.3	13	46.4	1	14.3	14	40.0
Concerned with Sector or National Level or with Multiple Agencies	4	6.7	0	4	6.7	10	35.7	0	0.0	10	28.6
Future Development of Executing or Implementing Agency, or the Sector	1	1.7	0	1	1.7	0	0.0	1	14.3	1	2.9
Subtotal	**46**	**76.7**	**0**	**46**	**76.7**	**23**	**82.1**	**2**	**28.6**	**25**	**71.4**
Addressed to ADB											
Specific to the Project, Sector or Country Strategy	11	18.3	0	11	18.3	5	17.9	2	28.6	7	20.0
ADB's Internal Processes, Guidelines or Strategies	3	5.0	0	3	5.0	0	0.0	3	42.9	3	8.6
Subtotal	**14**	**23.3**	**0**	**14**	**23.3**	**5**	**17.9**	**5**	**71.4**	**10**	**28.6**
Total	**60**	**100.0**	**0**	**60**	**100.0**	**28**	**100.0**	**7**	**100.0**	**35**	**100.0**

ADB = Asian Development Bank, CAPE = country assistance program evaluation, DMC = developing member country, OED = Operations Evaluation Department, PPAR = project/program performance audit report, PPER = project/program performance evaluation report, SAPE = sector assistance program evaluation, SES = special evaluation study, TPAR = technical assistance performance audit report, TPER = technical assistance performance evaluation report.

[a] The total is greater than the total number of follow-up recommendation because follow-up recommendations are addressed to both the DMCs and ADB.

[b] Includes CAPEs, SAPEs, and SESs.

Source: OED.

STATUS OF IMPLEMENTATION OF FOLLOW-UP ACTIONS

Table A14.1: Status of Follow-up Actions from Recommendations in 2004 and 2005 OED Reports

Item	From 2004 OED Reports					From 2005 OED Reports					
	PPAR/TPAR		SES	Total		PPER/TPER		SES		Total	
	Number	%	Number	Number	%	Number	%	Number	%	Number	%
Addressed to DMCs											
Action Has Been or Is Being Taken	22	43.1	0	22	43.1	11	40.7	0	0.0	11	32.35
Action Partly Taken	5	9.8	0	5	9.8	6	22.2	1	14.3	7	20.59
Subtotal	**27**	**52.9**	**0**	**27**	**52.9**	**17**	**63.0**	**1**	**14.3**	**18**	**52.94**
No Action Because DMC Disagreed	0	0.0	0	0	0.0	0	0.0	0	0.0	0	0.0
ADB Requested DMCs to Take Action but There was No Response Yet	1	2.0	0	1	2.0	4	14.8	0	0.0	4	11.76
No Action Taken	11	21.6	0	11	21.6	1	3.7	1	14.3	2	5.9
Subtotal	**12**	**23.5**	**0**	**12**	**23.5**	**5**	**18.5**	**1**	**14.3**	**6**	**17.65**
Addressed to ADB											
Action Has Been or Is Being Taken	3	5.9	0	3	5.9	3	11.1	3	42.9	6	17.65
Action Partly Taken	6	11.8	0	6	11.8	0	0.0	2	28.6	2	5.9
Subtotal	**9**	**17.6**	**0**	**9**	**17.6**	**3**	**11.1**	**5**	**71.4**	**8**	**23.53**
Will Be Addressed in Future Operations	0	0.0	0	0	0.0	1	3.7	0	0.0	1	2.9
No Action Taken	3	5.9	0	3	5.9	1	3.7	0	0.0	1	2.9
Subtotal	**3**	**5.9**	**0**	**3**	**5.9**	**2**	**7.4**	**0**	**0.0**	**2**	**5.9**
Total	**51** [a]	**100.0**	**0**	**51**	**100.0**	**27** [b]	**100.0**	**7**	**100.0**	**34**	**100.0**

ADB = Asian Development Bank, CAPE = country assistance program evaluation, DMC = developing member country, OED = Operations Evaluation Department, PPAR = project/program performance audit report, PPER = project/program performance evaluation report, SAPE = sector assistance program evaluation, SES = special evaluation study, TPAR = technical assistance performance audit report, TPER = technical assistance performance evaluation report.

[a] No response to eight follow-up recommendations, seven for implementation by executing agency/DMC, and one for implementation by ADB.

[b] No response to one follow-up recommendation from PPER for implementation by executing agency.

Source: OED.

Table A14.2: 2005 Annual Evaluation Review Recommendations and Status of their Implementation

	Recommendations	Status of Implementation
1	**Improving Performance in Poorly Performing Sectors and Regions** In 2005, Management should begin a process of identifying new approaches to strengthen quality assurance for project design, formulation, and administration to improve development results in the problem sectors and regions—including strengthening the feedback and learning in these areas—so that mistakes are not repeated and success stories can be replicated.	A panel was formed in January 2006 to conduct ADB's first quality-at–entry assessment of country strategy and programs and projects. This assessment will establish quality at entry criteria and standards for country strategy and projects and programs.
2	**Improving Selectivity and Focus Based on Past Results** Beginning in 2006, Management should require country strategies and programs (CSPs) to analyze past performance on a sectoral basis, and summarize the results in a tabular format to help improve sector selectivity and focus, including the identification of sectors from which ADB should consider exiting.	MTS II emphasizes sectoral selectivity and the identification of core operational areas for ADB. Sector priorities are consistent with OED findings. As a result of a DEC recommendation, the linkage between CSPs and CAPEs, which analyze past portfolio performance by sector, was strengthened.
3	**Strengthening Project Economic Analysis** Beginning in 2006, the regional departments should strengthen sensitivity and risk analysis. ERD should continue to report on progress in its retrospective reviews of economic analyses.	ERD issued the Economic Analysis Retrospective 2005: Strengthening Quality at Entry of ADB Operations in August 2006. Sensitivity testing remains mechanical and was rated as partly satisfactory or unsatisfactory in about half of the RRPs. Risk analysis was undertaken for only 4 of 39 projects.
4	In 2005, a task force of ERD economists and country economists should be formed to (i) design a way to fill the void in long-term forecasts at the country level, and (ii) explore partnership opportunities in this area with academic and research institutions in DMCs and international organizations involved in long-term economic forecasting.	ERD has undertaken some work on long term forecasting. However, such forecasts are not regularly developed and published by ADB.
5	**Addressing Potential Risks Posed by Bunching** Action should be taken to address ADB's bunching problem. Steps need to be taken to change the incentives, both formal and informal, that govern staff behavior. Examples of things that could be considered include (i) issuing a clear written message from Management to staff that achieving development results is more important than the calendar year in which a loan is approved; (ii) reporting on the compliance with the project-readiness filters when seeking authorization for loan negotiations; (iii) monitoring project start-up indicators and reporting the results to Management and the Board; (iv) focusing, during staff performance reviews, more on loan effectiveness or the first disbursement than on loan approval; and (v) examining the feasibility of strengthening ADB's personnel records to include tracking project and TA performance over long periods of time on a staff-by-staff basis to assess if and how such information could be taken into account when making personnel decisions.	Bunching improved in 2005 but delays in project start-up indicators suggests that loans are brought to the Board prematurely. The action plan to improve project quality envisions a greater use of project readiness filters. As a result of work undertaken in this AER, a feasibility study will be undertaken to link the achievement of development results and the human resource management system. MTS II contains clear statements that the approval culture will be addressed and the focus will be on achieving development results.
6	**Evaluation of ADB's Energy Policy** The power sector has been, and is expected to continue to be, an important part of ADB's operations. ADB's current energy policy, adopted in 2000, and previous energy policies have not been evaluated. An evaluation of ADB's energy sector policy should be added to OED's 2006–2008 work program.	The evaluation study is ongoing with completion scheduled for 2007.
7	**Improving OED's Recommendations** To help improve the strategic impact of evaluations as measured in terms of the implementation of OED recommendations and provide a basis for improving the quality of Management responses, OED will sharpen the focus of its recommendations by (i) ensuring that its recommendations are actionable and able to be monitored; (ii) discussing the draft findings and recommendations at the director-general level for more complex evaluations and at the director level for project and TA evaluations; (iii) more fully discussing recommendations with DMCs during evaluation missions; and (iv) developing a more user-friendly system allowing better access to OED's lessons and recommendations and to improve the tracking of actions taken on the recommendations.	Action has been taken on (i), (ii) and (iii) and work has commenced on (iv). There is scope to further sharpen OED recommendations and strengthen the monitoring system to track subsequent action taken. Work has started on the latter. However, ADB is not making full use of OED findings.

MANAGEMENT RESPONSE ON THE 2006 ANNUAL EVALUATION REVIEW

On 21 August 2006, the Director General, Operations Evaluation Department, received the following response from the Managing Director General on behalf of Management:

A. General Comments

1. Management appreciates the ambitious and broad-arranging analytical work and extensive internal consultations undertaken for this year's Annual Evaluation Review (AER). The AER provided us with valuable insights about common factors that contribute to good project performance, and raises challenging questions about the role of governance in fostering development, and the importance of staff incentives for improved development outcomes.

2. Management notes that the AER findings support the choice of priority sectors in the second Medium Term Strategy. We also note that the AER found that success rates for both OCR- and ADF-funded projects improved markedly in the 1990s compared with the previous two decades. We are also encouraged by the relative increase in the success rate of ADF projects, which used to lag far behind that of OCR projects. Management is committed to building on these achievements.

B. Comments on Recommendations

1. Governance and the Performance-based Allocation

3. Management has reservations about the AER recommendation to review "the high weight given to governance variables in the current performance-based allocation (PBA) formula in the context of the upcoming review of the ADF IX replenishment." The claim that the governance weighting is too high runs contrary to the observation that the weighting is consistent with the preferences of ADF donors, and is still significantly lower than the 66% weight assigned to governance in the World Bank's PBA formula. The AER also notes the importance of harmonization with other MDBs on prominent cross-cutting issues such as governance, and that our method of assessing governance under the PBA policy is fully harmonized among MDBs.

4. The recommendation to reduce the weighting of governance is based on several propositions: (i) governance has many definitions and is hard to measure, (ii) there is a relatively weak relationship between all dimensions of governance and the level of development in ADB's DMCs, and (iii) there is a generally weak relationship between good governance and development results in ADB-funded projects. These propositions follow from a statistical exercise using broad governance indicators that are different from the detailed and specific governance benchmarks used in the PBA questionnaires of ADB and other key MDBs. Furthermore, the emphasis of the analysis is on the instrumental value of governance in affecting other development outcomes, such as portfolio performance, rather than the intrinsic value of governance as an important development outcome in itself. Furthermore, the evidence cited and presented in the report to support a "relative weak relationship between all dimensions of governance and the level of development in ADB's DMCs" is misleading. Contrary to the impression given in the report, one of the more robust results to emerge from a large literature on the (cross-country) determinants of growth is that governance matters. Finally, in

examining the impact of governance on other development results, the research cited in AER is methodologically weak. Robust conclusions can hardly be drawn regarding the causal role of governance in effecting other development results or outcomes from mere statistical association between different variables, or the lack thereof, in the absence of a sound theoretical model and causality tests because of the 'missing variables' problem.

2. Strengthening ADB's Staff Performance Appraisal System

5. Although we disagree with some of the sweeping generalizations made about the lack of incentives or recognition for project implementation, we support the recommendation to better align staff incentives with development results. It may not be practical to try to capture the discreet contributions of individual staff to development results on an annual basis, however, because project impacts are measured over years, and many different staff are involved from project concept to completion. We do know that project success is correlated with quality at entry, readiness for implementation, and the intensity of implementation supervision. Portfolio administration and performance therefore must feature prominently in departmental workplans, and cascade down to the division and staff level. The new PDP system, which includes performance indicators based on workplan outputs, provides the flexibility for greater emphasis on project implementation. The challenge for Management is to ensure that performance indicators are fair, create the right incentives, and are applied consistently across departments.

6. At the institutional level, the Work Program and Budget Framework and annual budget exercises provide the opportunity to rebalance allocation of resources between project processing and administration. Management has already committed to improving overall portfolio performance through, for example, more delegation to Resident Missions.

7. It should be stressed that other critical factors contributing to project implementation success are beyond the immediate control of ADB and require long-term engagement with DMCs with particular focus on capacity improvement and capacity building. These factors include the performance of the Executing Agency, the availability of counterpart funds, and the complexity of government approval procedures.

C. Conclusions

8. Management welcomes AER's endorsement of the sector focus in MTS II, and appreciates the many trenchant observations on the determinants of project success. On the issue of the weight of the governance factor in PBA, we will look forward to the discussions in the forthcoming ADF IX mid-term review. We will consider conducting a study to strengthen ADB's staff performance appraisal system to promote project quality at entry and project administration.