

## Evaluation Approach

# Special Evaluation Study on Post-Project Sustainability of ADB Projects

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## A. Background

### 1. The International Context

1. Over the past 10–15 years, the Asian Development Bank (ADB), in common with other international development agencies, has become increasingly concerned with project sustainability and sustainable development results. Both governments and international development agencies are aware that development planning sometimes focuses more heavily on project approval and implementation and that less attention is paid to issues of operation, maintenance, and sustainability of project outputs and outcomes. While many countries have developed sophisticated computer systems to monitor project implementation and to compare intended and actual physical and financial performance, few if any developing countries produce regular monitoring reports on project operation and maintenance and on whether projects are actually producing the intended benefits. Neither governments nor international development agencies receive systematic information on how well their investments are producing their intended social and economic benefits over time during project life. As resources become increasingly scarce, this lack of information on the performance of public investment programs is of increasing concern, and demands for the systematic monitoring and evaluation of project/program sustainability will continue to grow. The limited available evidence suggests that project sustainability is a serious problem and as many as 40% of all new programs are not sustained beyond the first few years after termination of external funding.<sup>1</sup>

### 2. Defining Sustainability

2. The principal idea is that any project, irrespective of whether it is in the agricultural, urban, industrial, transport, or energy sectors, is designed to produce a continuous flow of outputs, benefits or services throughout its intended lifetime. For some kinds of projects (for example, energy or housing construction), the intended project lifetime may be as long as 30 years or considerably shorter for other types of projects.

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<sup>1</sup> M. Bamberger and S. Cheema. 1990. Case Studies of Project Sustainability. *World Bank*; and R. Savaya, et al. 2008. Sustainability of Social Programs: A Comparative Case Study Analysis. *American Journal of Evaluation*, vol. 29, no. 4, pp.478–493.

3. Formal definitions of sustainability include:
- (i) AusAID – The continuation of benefits after major assistance from a donor has been completed.
  - (ii) IFAD – The likely continuation of net benefits from a development intervention beyond the phase of external funding support.
  - (iii) IFC – Their definition of sustainability encompasses four dimensions of good business performance: financial; economic; environmental; and social.
  - (iv) World Bank – The ability of a project to maintain an acceptable level of benefit flows through its economic life.
  - (v) Ministry of Foreign Affairs, Netherlands – Since an activity can hardly be considered effective if the effect it has achieved is not lasting, sustainability is in fact an aspect of effectiveness. At the same time the concept of sustainability comprises a variety of dimensions that are relevant for assessing an intervention.
  - (vi) IED guidelines – The sustainability criterion looks at the probability that the human, institutional, financial and natural resources are sufficient to maintain the outcome achieved over the economic lifetime of the project and that any risks need to be managed.

4. The success of a project must be assessed in terms of its ability to sustain a flow of benefits over time. This suggests a distinction between whether a project has been sustained up to the time it is evaluated (often around five to ten years after it has begun to operate) and whether it is likely to be sustainable over its intended lifetime. The assessment must also take into consideration the expected flow of benefits over the project life cycle. For certain kinds of projects (for example, some irrigation projects), the maximum flow of benefits may be achieved soon after the project begins to operate, and may gradually decline thereafter, while in other kinds of projects (for example, policy reform programs), there may be a relatively long consolidation period before the maximum level of benefits are achieved. The different project life cycles obviously affect the appropriate times at which to assess project sustainability. It is important to ensure that evaluation of the sustainability of particular projects/programs is complemented by analysis of the contribution of the project/program to broader sectoral or national development goals.

## **B. Factors Affecting Sustainability**

5. IED's 2001 SES on Sustainability of Policy Reforms through Selected Advisory Technical Assistance focused on policy reforms in the power and water sectors. Four key areas to enhance the effectiveness and sustainability of policy reforms through ADTAs were identified:

- (i) Policy reform needs to be treated as a dynamic process within a given sector, and not a one-off policy change or a fixed set of institutional changes.
- (ii) Ownership is the key to success and sustainability.
- (iii) The effectiveness of future ADTAs depends on ADB's ability to allocate the required resources.
- (iv) Accountability for results from ADTAs needs to be enhanced through building coalitions among interest groups for reform.

6. IED's 2003 Review of Evaluation Activities found that sustainable infrastructure projects exhibited the following characteristics: (i) strong government commitment to institutional, technical, and financial sustainability of the project, including cost recovery and recurrent budget needs; (ii) an enabling policy environment; (iii) adequate capacity for maintenance by beneficiary communities as well as incentives for these communities to maintain project facilities; (iv) appropriately designed project facilities and equipment using tested and

economically viable technology and with low maintenance requirements; and (v) generally satisfactory technical and financial performance of implementing agencies.

7. Based on a preliminary literature review and previous evaluations, the task team for the study has identified four main determinants of project sustainability:

- (i) Economic - market demand, return on investment (efficient use of resources compared to alternatives);
- (ii) Financial - provision of finances, obtaining revenues;
- (iii) Technical – project design, use of appropriate technology, maintenance of equipment/physical infrastructure, environmental impact (sustainable use of natural resources); and
- (iv) Institutional capacity and ownership - ability of client government/agencies to implement/manage operations of the project on an ongoing basis throughout the technical life of the project. Stakeholder commitment to the project and political economy considerations.

8. The relative importance of each set of factors varies from one sector to another. In agriculture, a key determinant is the commitment of government to the principle of rural welfare improvement, combined with the development of the necessary institutional, financial, and human capital. In contrast, in sectors such as transport, urban, and water supply, many of the determinants of sustainability, such as choice of technology, design, operations, and maintenance, are within the control of project planners and managers.

#### **Box 1: World Bank's Example**

The World Bank's Operations Evaluation Department (OED) first reviewed sustainability in their June 1985 report: Sustainability of Development Projects: First Review of Experience. In 1990, they produced Case Studies on Project Sustainability. In addition to their Implementation Completion Reports (ICR) and Project Performance Assessment Reports (PPAR), the World Bank also perform Impact Evaluation Reports (IER) about five to eight years after the close of loan disbursements. Only 33 of these are available on the WB web site. The oldest is dated 1986 but only one is from the 2000s. Indicators of project sustainability (World Bank 1990) can be grouped into four categories: (i) Continued Delivery of Services and Production of Benefits; (ii) Maintenance of Physical Infrastructure; (iii) Long-Term Institutional Capacity; and (iv) Political Support.

Source: World Bank.

### Box 2: Australia's Example

Promoting Practical Sustainability was published by AusAID in 2000 (<http://www.usaid.gov/publications/pdf/sustainability.pdf>). It is a well focused and carefully arranged report which summarizes the key factors affecting sustainability as being: (i) Partner Government and Donor Policies; (ii) Participation; Management and organization; (iii) Financial and Economic; Technology; Social, Gender and Culture; Environmental factors; and (iv) External political and economic factors.

For example: "In some countries and sectors financial sustainability is unlikely in the medium term. If aid is provided to support existing public sector activity in that situation then less effective outcomes are inevitable; at best we are arresting decline as well as buying time until reform occurs. To move towards sustainable approaches to service delivery new models and prototypes may need to be developed, tested, accepted and implemented. Aid therefore should be part of the process of change; we should ensure that our assistance is not delaying progress towards sustainability but actually supports it." Against, but not contradictory to which is "user-pays. Payment is an expression of value. If people are willing to pay for a good or service, then they want it. Demonstrated demand is a strong indicator of likely sustainability, both for economic and social sector programs and projects. User pays approaches also generate revenue that can be used to continue the service. Even in very poor communities, user pays approaches can work, and may be the only sustainable solution to service delivery if the government is unable or unwilling, to provide adequate operating funds." Similarly, while not confusing project sustainability with sustainable development, the report gives the Bruntland Report definition "Environmental sustainable development can be defined as: "development that meets the needs of the present generation without compromising the ability of future generations to meet their own needs." Environmental sustainable development is strengthened if environmental issues are considered at all stages of the activity cycle."

Most importantly, the report emphasises the work required during project preparation in order to increase the likelihood of sustainability. This is what it calls Promoting Sustainability throughout the Activity Cycle. It also contains Sustainability Tools to be used from project identification through to the MOU and Phase Out. Similar guidance appears to be missing in the guidelines of both the World Bank and the ADB.

Source: AusAID.

### C. ADB's Approach to Sustainability

9. At the project preparatory stage due diligence guidelines for proposed projects require the use of the economic and financial viability criteria, the financial internal rate of return (FIRR) and the economic internal rate of return (EIRR) to determine the acceptability of an investment project in terms of economic efficiency and sustainability.<sup>2</sup> The FIRR shows long run returns to the project owners, and the EIRR is the main indicator of project's overall lifetime benefits from the national economy perspective. Financial performance indicators (financial ratios) are likewise used to assess and monitor the project's financial sustainability and the financial viability of the executing agency.<sup>3</sup>

10. In practice, the FIRR is given and compared to the weighted average cost of capital in the RRP. Sustainability is reported qualitatively, with no reference in the text to the debt service coverage ratio (DSCR). Many RRP's are observed to include statements that the project is sustainable even though calculated DSCR are negative in several early years. Sustainability can then be justified only by the practical assumption that the EA will be able to pay the debt. In the case of public sector projects, loans are guaranteed by the respective governments.

<sup>2</sup> ADB. 2003. Economic Analysis of Projects. *Operations Manual*. OM G1/OP. Manila.

<sup>3</sup> ADB. 2008. Financial Management Systems, Financial Analysis, and Financial Performance Indicators. *Operations Manual*. OM G2/BP. Manila.

11. ADB's post project and program evaluation guidelines<sup>4</sup> specify that the evaluator should look at the probability that the human, institutional, financial and natural resources are sufficient to maintain the outcome achieved over the economic lifetime of the project. If the calculated EIRR is greater than the accepted threshold of 12% it is concluded that the project lifetime benefits will likely be greater than the investment and operating cost and investing in the project is recommended. Project completion reports and project performance evaluation reports use the FIRR to assess the project's financial viability and sustainability. At post evaluation, financial indicators are also used to assess the capacity of the operating entity to operate and maintain project facilities adequately and to achieve cost recovery. The EIRR and FIRR are regarded as important tools in the decision to fund the project and as a measure of efficiency in resource use and of likelihood of sustaining project outcomes in the future.

12. In addition, each loan or grant document (i.e., RRP) discusses identification of risks to sustainability, mitigation measures, including technical assistance, government assurances and loan covenants. Risks are also mentioned in project/program design and monitoring framework attached to the RRP. In addition, Project Administration Memorandum (PAM) has a mandatory section on performance monitoring and evaluation. At completion of a project, a project completion report is prepared which, amongst others, presents a preliminary assessment of project sustainability. As per the ADB business model, operations departments consider their work completed and they exit; and the concerned executing agencies of the recipient governments are supposed to ensure continuity in project benefit flow. However, enforcement or compliance of these requirements and the quality of reporting varies widely across projects and countries. ADB also does not have a system for recognizing its staff who perform best in terms of producing tangible development results (e.g., improved welfare of people, including poor women and children) through ADB assistance. ADB's staff career development procedures do not look back at the development results of projects and programs designed, implemented and monitored and evaluated by staff.

13. At ADB, the approach to evaluating and rating sustainability of programs and projects has evolved over time in the following manner:

- (i) 1973: PPARs commence (prepared by the ADB's former Economic Office, which was responsible for carrying out independent evaluation of projects at that time).
- (ii) 1978: Post-Evaluation Office was established and assumes the responsibility of preparing PPARs.
- (iii) 1979: PCRs commence.
- (iv) 1982: The document Post-Evaluation Office: Activities and Procedures (which describes the purpose and content of each report) was circulated.
- (v) 1987: IED formalized the 3-rating criteria system through the issuance of the Guidelines for the Preparation of PPARs which include a section on sustainability.
- (vi) 1995: PCRs adopt the IED rating methodology (PAI was revised to incorporate this).
- (vii) 2000: PPAR Guidelines revised based on 5 key performance criteria: relevance (20%), efficacy (25%), efficiency (20%), sustainability (20%), and institutional development and other impacts (15 %). PPARs adopt a 4 category rating system for each criterion.
- (viii) 2001: PCRs commence using the PPARs rating system.

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<sup>4</sup> ADB. 2006. *Guidelines for Preparing Performance Evaluation Reports for Public Sector Operations*. Manila.

- (ix) 2005: The 2000 PPAR guidelines were revised. PPARs now called PPERs and a rating system based on 4 key performance criteria: relevance (20%), effectiveness (30%), efficiency (30%), and sustainability (20%) is introduced.

#### D. The Sustainability of ADB's Programs/Projects

14. The sustainability of ADB projects is an issue that has been raised in several IED reports over the years. For example, the 2000 Review of Evaluation Activities stated "The projects evaluated in 2000 showed less than satisfactory achievements in ensuring sustainability. Overall, 11 of the 21 evaluated projects (52%) were rated either less likely or unlikely to be sustained. The proportion was higher for those projects rated partly successful and those rated unsuccessful." The 2000 report also stated: "the scope of PCR assessments needs to be extended, especially in relation to an assessment of project/program purpose, design, and sustainability."

15. The 2003 Annual Report of the Development Effectiveness Committee to the Board of Directors stated: "The Committee was concerned about the doubtful sustainability of more than half of the evaluated projects. As all projects were considered sustainable when presented to the Board, the assessment of related risks, including their minimization and mitigation, should be provided in the report and recommendation of the President. Consequently, they should be discussed, and measures for their mitigation proposed, in the country strategies and programs. To enhance sustainability, it is essential that the follow-up actions recommended in evaluation reports be implemented for completed projects, and the lessons learned incorporated in future projects."

16. A preliminary analysis of sustainability, ratings reported in PCRs and PPERs from 1997 to 2009 are shown in the following tables.

**Table 1: Number of Assessed Loans, PCRs, and PPERs by Sector**  
(Preliminary Results)

<b>Sector</b>	<b>Code</b>	<b>Total (%)</b>	<b>PCRs (%)</b>	<b>PPERS (%)</b>
Agriculture And Natural Resources	ANR	19.8	19.8	13.6
Education	EDU	11.0	11.3	6.8
Energy	ENE	13.3	13.2	11.4
Finance	FIN	5.5	5.6	8.0
Health and Social Protection	HSP	5.5	5.4	10.2
Industry and Trade	INT	2.5	2.4	1.1
Water/Other Municipal Infrastructure/Services	WTR	13.8	13.2	13.6
Public Sector Management	PSM	3.2	3.3	6.8
Transport and ICT	TRN	19.3	19.5	21.6
Multisector	XMS	6.0	6.4	6.8
	<b>Total %</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
	<b>Total Number</b>	<b>435.0</b>	<b>425.0</b>	<b>88.0</b>

Source: IED.

**Table 2: Ratings of Overall Success and Sustainability**  
(Preliminary Results)

Assessment	Code	PCR (%)	VR (%)	PPER (%)
<b>Overall Assessment</b>				
Highly Successful	HS	10	8	8
Successful	S	64	58	60
Partly Successful	PS	20	20	26
Unsuccessful	US	6	15	6
	<b>Total %</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Total Number</b>	<b>434</b>	<b>41</b>	<b>85</b>
<b>Sustainability Assessment</b>				
Most Likely	ML	8	5	6
Likely	L	56	45	56
Less Likely	LL	29	33	34
Unlikely	UL	7	18	5
	<b>Total %</b>	<b>100</b>	<b>100</b>	<b>100</b>
	<b>Total Number</b>	<b>396</b>	<b>42</b>	<b>86</b>

Source: IED.

**Table 3: Sustainability Assessments by Region**  
(Preliminary Results)

Region	PCR Sustainability (%)					PPER Sustainability (%)				
	ML	L	LL	UL	Total	ML	L	LL	UL	Total
South Asia	6	58	31	5	100	0	57	38	5	100
South East Asian	10	52	31	7	100	0	70	27	3	100
Central/West Asia	7	48	38	8	100	0	55	45	0	100
East Asia	14	77	9	0	100	22	50	28	0	100
The Pacific	0	48	32	19	100	14	14	43	29	100
<b>Total %</b>	<b>8</b>	<b>56</b>	<b>29</b>	<b>7</b>	<b>100</b>	<b>6</b>	<b>56</b>	<b>33</b>	<b>5</b>	<b>100</b>
<b>Total Number</b>	<b>33</b>	<b>222</b>	<b>114</b>	<b>27</b>	<b>396</b>	<b>5</b>	<b>49</b>	<b>29</b>	<b>4</b>	<b>87</b>

Source: IED.

**Table 4: Sustainability Assessments by Project Completion Year**  
(Preliminary Results)

PCR	2008	2007	2006	2005	2004	2003	2002	2001	2000	1999	Total
ML	0	6	3	7	12	12	14	7	2	20	8
L	67	65	66	56	43	50	62	62	51	30	56
LL	0	16	25	29	36	33	21	27	43	40	29
UL	33	13	6	8	9	5	3	4	4	10	7
<b>Total No.</b>	<b>6</b>	<b>31</b>	<b>32</b>	<b>59</b>	<b>58</b>	<b>42</b>	<b>58</b>	<b>45</b>	<b>47</b>	<b>10</b>	<b>389</b>

  

PPER	2007	2006	2005	2004	2003	2002	2001	2000	1999	Total
ML	0	0	0	0	0	0	11	4	17	6
L	50	33	50	75	50	36	58	58	67	55
LL	50	67	50	25	50	45	21	38	17	34
UL	0	0	0	0	0	18	11	0	0	5
<b>Total No.</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>11</b>	<b>19</b>	<b>24</b>	<b>12</b>	<b>83</b>

Source: IED.

**Table 5: World Bank and ADB Sustainability Assessments by Sector**  
(Preliminary Results) (%)

Sector	World Bank (%)	ADB PCR (%)	ADB PPER (%)	ADB Code
Telecommunications	90	100	100	3706
Development Finance	66	64	40	PSM
Power/Energy	64	79	80	ENE
Transport	50	63	79	TRN
Population/Nutrition	50	78	89	HSP
Education	44	78	67	EDU
Urban	17	44	0	3813
<b>Total</b>	<b>52</b>	<b>64</b>	<b>62</b>	

Source: IED and World Bank.

**Table 6: PCR and PPER Sustainability and Overall Assessments by Sector**  
(Preliminary Results)

Sector Code	PCR Sustainability (%)					PPER Sustainability (%)				
	ML	L	LL	UL	Total	ML	L	LL	UL	Total
ANR	1	56	35	7	100	0	50	33	17	100
EDU	20	58	20	2	100	0	67	33	0	100
ENE	15	64	17	4	100	0	80	20	0	100
FIN	0	65	25	10	100	0	86	14	0	100
HSP	6	72	22	0	100	0	89	11	0	100
INT	38	0	38	25	100	100	0	0	0	100
WTR	5	51	34	10	100	8	8	75	8	100
PSM	9	55	9	27	100	20	20	60	0	100
TRN	8	55	32	4	100	11	68	21	0	100
XMS	4	50	38	8	100	0	33	50	17	100
Total	8	56	29	7	100	6	56	33	5	100
<b>Total No.</b>	<b>33</b>	<b>222</b>	<b>114</b>	<b>27</b>	<b>396</b>	<b>5</b>	<b>49</b>	<b>29</b>	<b>4</b>	<b>87</b>

Sector Code	PCR Overall (%)					PPER Overall (%)				
	HS	S	PS	US	Total	HS	S	PS	US	Total
ANR	1	61	30	8	100	0	42	33	25	100
EDU	14	69	16	0	100	17	67	17	0	100
ENE	12	72	12	3	100	0	78	22	0	100
FIN	0	63	29	8	100	0	71	14	14	100
HSP	8	71	21	0	100	0	67	33	0	100
INT	0	36	36	27	100	0	100	0	0	100
WTR	11	56	25	8	100	8	50	42	0	100
PSM	7	43	36	14	100	0	40	60	0	100
TRN	17	71	10	2	100	26	63	11	0	100
XMS	15	63	19	4	100	0	67	17	17	100
Total	10	64	21	5	100	8	60	26	6	100
<b>Total No.</b>	<b>43</b>	<b>280</b>	<b>90</b>	<b>24</b>	<b>437</b>	<b>7</b>	<b>52</b>	<b>22</b>	<b>5</b>	<b>86</b>

Source: IED.

## E. Evaluation Issues

17. The identification of strategies and actions needed to ensure project sustainability in developing countries is difficult given variations in their administrative, political and socioeconomic structures and the lack of comparative data. The international literature and ADB's own experiences point to several policy issues that require appropriate responses in order to ensure project sustainability.

18. **The sustainability of ADB projects/programs is highly variable.** The figures presented in Tables 1–6 show that overall 64% of projects are rated in PCRs/PPERs as being most likely/likely to be sustainable. For PCR validation reports the figure is 50%. Regionally, 72% of projects in East Asia are rated most likely/likely to be sustainable in PPERs while for the Pacific the figure is 28%. There does not appear to be any pronounced trend in sustainability ratings over the time period 1999-2008. Ratings also vary significantly across sectors with 79% of energy sector projects rated most likely/likely to be sustainable in PCRs down to 38% of industry and trade projects.

19. **Project design is important.** Project and program sustainability are significantly affected by a number of factors which often receive only limited attention in project identification, analysis, and design. In order to maximize the likelihood of projects continuing to deliver their intended benefits throughout their economic lifetime, a number of factors must be carefully assessed during project preparation including: the opinions of intended beneficiaries about the proposed objectives, scope, implementation and proposed benefits of the project; the willingness of beneficiaries to accept the demands on their financial resources, time and labor which are proposed in the project design; projects must be designed to be sustainable within the prevailing local social, economic, and political context; projects must develop the necessary linkages to policy makers and administrators at the local, regional and national levels; assessment of the institutional arrangements for project operation in terms of their potential for sustaining the project; identification of the major stakeholders and evaluation of their likely role in ensuring project sustainability; assessing whether the proposed technologies are appropriate; realistic assessment of the ongoing financial viability of the project including maintenance procedures; assessing the political, cultural, social and ecological sustainability of the project. If an individual program or project is considered unlikely to provide sustainable benefits within a medium term planning period then this should be clearly stated in the RRP.

20. **Public vs. private goods.** The literature suggests that the key factors affecting sustainability often vary depending upon whether the project's deliverables are public or private goods. For public goods one of the key factors is government's policy commitment and willingness to provide funding support. For private goods the financial viability of the project is usually dependent upon having adequate user pays mechanisms in place.

21. **Influence over outcomes.** Development programs and projects are generally complex and high-risk activities, the results of which are influenced by the actions of a number of different stakeholders. While ADB can improve the way in which it addresses sustainability (from Country Partnership Strategy formulation through to project identification, and the preparation of a robust sustainability strategy in the design document), expectations regarding ADB's influence over the sustainability of outcomes should be realistic. Ultimate responsibility for sustained benefits normally rests with the local stakeholders.

22. **ADB's guidelines.** PCR guidelines give no definition of sustainability but say that PPER guidelines should be used while the PPER guidelines for sustainability need to be more specific. Demand, pricing, policies, procedures, maintenance, human resources, political will, stakeholder participation, environmental, social, technological, and natural resource risks are all mentioned in the PPER as determinants of sustainability. However the guidelines would benefit from a conceptual framework for sustainability illustrating the role played by these various factors and how each one can be assessed.

23. **Loan covenants.** ADB's Financial Guidelines requires covenants covering financial performance in both the implementation and the operational periods. A preliminary analysis of

PCR and PPER shows many cases where loan covenants were not adhered to and many of these covenants affected financial sustainability. An evaluation study examining adherence to covenants and sustainability would be useful.

24. **Estimating sustainability with FIRRs.** An assessment of the FIRRs at the time of project completion and after the project has been operating for a number of years is often used as an indicator of project sustainability. The use of the rate of return as a summary indicator of project performance is particularly difficult for a multi-component project with social as well as economic objectives, since some types of costs and benefits are much easier to measure than others. There is a tendency to leave certain difficult to measure costs and benefits out of the calculations.

25. **Over estimation of benefits.** In practice IED's evaluations have found that there has been a consistent tendency to overestimate the EIRR at the time of project appraisal, and also at completion.

26. **Donor coordination.** Sustainability objectives can be compromised if individual donors promote incompatible development agendas and have different management and accountability requirements. Mechanisms that promote coordinated donor strategies for policy reform or sector development are more likely to support sustainable outcomes.

27. **Post-project completion results monitoring.** Currently there is no regular and comprehensive monitoring of outputs and outcomes of ADB-supported interventions after their completion. IED's Annual Report on 2007 Portfolio Performance recommended that ADB consider introducing a development results monitoring system for the post-project completion period, starting on pilot basis in selected DMCs for 3–5 years after project completion.

28. **Sustainability is often a low priority.** The international literature suggests that public sector project sustainability often receives inadequate attention for many reasons of which the following are the key ones.

29. First, sustainability requires appropriate institutional reform and changes in political and administrative organization coupled with appropriate incentives<sup>5</sup>. The impacts of these changes, however, are rarely neutral: they advance the interests of some groups in the society over those of others, alter the patterns of resource allocation among regions and localities, change the distribution of income and wealth, and expand or contract the scope of political influence. Therefore, no proposal for institutional reform escapes debate. In most cases, either too rapid changes in institutional structures are made without ensuring their sustainability or the status quo is maintained. There is some evidence from developing countries which suggests that sustainability can be equated with strong and viable local institutions. The inability of many developing countries in building and strengthening development planning and management institutions, particularly at regional (sub national) and local levels, has negatively affected the process of project sustainability.

30. Second, due to internal pressures from various groups in the society, governments are frequently forced to adopt a short-term horizon. While the policy statements might present the image of a long-term strategy, government actions might reflect ad hoc responses to pressures from vested interests. Where the political process is characterized by instability, this

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<sup>5</sup> Ostrom, E., C. Gibson, S. Shivakumar, and K. Anderson, 2001. *Aid, Incentives, and Sustainability*. Swedish International Development Cooperation Agency.

phenomenon is more common and frequent changes in the government's policy package are made that hinder sustainability of projects.

31. Third, in some cases donors may also have a narrow, short-term perspective. Indeed the literature points to several aspects of foreign assisted projects that are counterproductive to project sustainability: creation of new institutional structures and special units that further weaken the existing government and nongovernmental agencies; reluctance to make large-scale investments in institutional development; an emphasis on short term projects; too much reliance on tools of economic analysis without giving due consideration to administrative and sociological factors; failure to establish a more direct linkage between construction and maintenance functions; and changes in the development priorities of donors.

32. Fourth, project sustainability is difficult to accomplish in situations where a country is highly dependent on foreign resources for development projects and where local resource mobilization capacity is weak. In such situations, government is relatively more susceptible to external economic and other pressures. The ultimate test of project sustainability is, therefore, the ability of the recipient government to mobilize resources through instruments such as taxes and user charges. Cost recovery and recurrent cost financing are crucial for project replicability and sustainability as is the allocation of funds for maintenance of services and facilities.

33. Fifth, while one of the necessary conditions for project sustainability is active involvement of beneficiaries in planning and managing development activities, there are numerous constraints on meaningful community participation in some of the developing Asian countries. These include inability of some governments to provide an adequate framework for community participation, weak local leadership, rigidity of project planning and management procedures, and heterogeneity of local communities. Where top down, centralized procedures for community participation are not in place, communities should not be expected to sustain development projects which are based on the naive assumptions of central planners.

34. Finally, project sustainability requires political will at all levels of government to commit resources for ongoing development activities. In the context of scarcity of resources and competing demands from increasingly politicized groups, resource allocation is more likely to take place in response to the dictates of political expediency instead of economic rationality. The state of the art of project sustainability should, therefore, reflect the economic and political realities of the country.

35. **Our current understanding of post-completion project sustainability is limited.** Much more needs to be known about the extent to which development projects are sustained in developing countries, the factors that affect sustainability, and about actions at the national and international level needed to sustain projects. An analysis of projects which have or have not survived would help to identify the determinants of sustainability and to refine ADB's policies. Indeed, sustainability of development projects provides a rich and policy relevant agenda through which development scholars, policy analysts and practitioners can contribute to the task of refining and improving the process of project design, implementation and evaluation.

## **F. Evaluation Objective, Scope and Methodology**

36. **Objective.** The chief objective of the SES is to assess the understanding and measures of sustainability in ADB-funded projects and programs. To achieve this, the SES will address the following four key questions:

- (i) To what extent did the benefits of ADB financed projects continue after implementation of ADB funded projects has been completed or ADB funding ceased?
- (ii) What were the major factors which influenced the achievement or non-achievement of sustainability in ADB financed projects?
- (iii) What were the major risks to sustainability identified at appraisal and during implementation, and how were they mitigated?
- (iv) What are the implications for ADB's approach to ensuring project sustainability to achieve maximum development effectiveness from its development operations? What and how ADB should do differently to ensure post-completion sustainability and development effectiveness of its development assistance?

37. The scope of the SES will include: (i) public sector projects; (ii) project and program loans and their associated TAs; and (iii) the pre-primary and basic education subsector; the conventional energy, energy sector development, and large hydropower subsectors; the road transport subsector; the water supply and sanitation subsector; the finance sector development subsector; and the small/medium enterprise development subsector.

38. To keep the evaluation's scope to a manageable size, stand alone grants/TAs will not be examined. Consideration was also given to including DFI loans in the evaluation. Given the large number and complexity of these loans it was considered that a separate study was required to adequately cover this subject.

39. **Methodology.** The evaluation's methods will include:

(i) Developing a projects database that includes all ratings from all PCRs/PPERs/PCR validations since 2001. Using this database to undertake the following analysis: overall summary of ratings; sustainability trends over time; sustainability ratings by country, by sector, by modality; relationship between effectiveness and sustainability; relationship between efficiency and sustainability. This exercise will also refine the preliminary results presented in Tables 1–6.

(ii) Content analysis of all PCRs/PPERs/PCR validations since 2001. Identify and classify the explanations given for high and low ratings of sustainability. Analyze: overall summary of explanations by rating category; rating explanations by country, by sector, by modality; compare PCR vs PPER explanations. Undertake a literature review to help identify the critical success factors for sustainability.

(iii) Undertaking project/program case studies within each of the four sectors. A purposeful sample of about eight projects per sector has been identified in order to give a balance across countries and sustainability challenges/outcomes (see Appendix 2). The case studies will examine how sustainability risks were identified and managed at each stage of the project cycle. Field missions will be undertaken to assess the current sustainability status for selected projects and the post-completion monitoring activities of EAs. Interviews will be conducted with EAs, RM and HQ staff to help identify the critical success factors for sustainability.

(iv) Consultation with other MDBs regarding their policies to enhance sustainability and compare these policies to ADB's approach. Compare sustainability ratings from PCRs to those reported in PPERs. Based upon the above information and the evaluation's other research findings assess ADB's policy/approach to sustainability and offer recommendations for improvement.

40. The evaluation matrix is presented in Appendix 1, and questions to guide discussions with other MDBs are shown in Appendix 2.

### **G. Implementation Arrangements and Resource Requirements**

41. The study will be co-led by J Scott Bayley, Evaluation Specialist, and Suganya Hutaserani, Lead Specialist (Development Evaluation) with inputs from Pradeep Perera, Senior Evaluation Specialist (Energy Sector); Toshiyuki Yokota, Senior Evaluation Specialist, and Sangay Penjor, Principal Evaluation Specialist (Water Supply). The IED team will be supported by a team of national and international consultants.

42. The following is the study schedule.

<b>Activity</b>	<b>Proposed Schedule</b>
1. Approval of Approach Paper	I April 2010
2. Desk review, data collection, analysis phase	III March—IV May 2010
3. Recruitment of consultants	III March—II April 2010
4. Independent evaluation missions	I May—II June 2010
5. IED internal review	II July 2010
6. Government and interdepartmental review	I Aug 2010
7. DG, IED Approval	II September 2010
8. DEC discussion	II October 2010

#### Appendixes:

1. Proposed Evaluation Matrix
2. Discussion Questions

### PROPOSED EVALUATION MATRIX

Evaluation Question	Methodology	Source of Information	Criteria for Judgment
<b>(i) To what extent did the benefits of ADB financed projects continue after implementation of ADB funded projects has been completed or ADB funding ceased?</b>	<ul style="list-style-type: none"> <li>• Desk research to assess project sustainability ratings using the database developed for this purpose by the evaluation</li> <li>• Missions to selected DMCs to review a sample of projects and determine their current sustainability status</li> </ul>	<ul style="list-style-type: none"> <li>• ADB project documents, e.g. RRP, BTORs, PCR, PPER, etc.</li> <li>• ADB databases</li> <li>• ADB staff</li> <li>• DMC stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• ADB guidelines</li> <li>• trends in ratings over time</li> <li>• Stakeholder values</li> </ul>
<b>(ii) What were the major factors which influenced the achievement or non-achievement of sustainability in ADB financed projects?</b>	<ul style="list-style-type: none"> <li>• Literature review</li> <li>• Content analysis of PCR/PPER and PRC validation reports</li> <li>• Interviews of EA, RM and HQ staff</li> <li>• Case studies of selected projects</li> </ul>	<ul style="list-style-type: none"> <li>• ADB project documents, e.g. RRP, BTOR, PCR, PPER, etc.</li> <li>• ADB staff</li> <li>• DMC stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Analysis and testing of the factors identified through our literature review and ADB documents</li> </ul>
<b>(iii) What were the major risks to sustainability identified at appraisal and during implementation, and how were they mitigated?</b>	<ul style="list-style-type: none"> <li>• Case studies of selected projects in the education, power, transport and water sectors</li> </ul>	<ul style="list-style-type: none"> <li>• ADB project documents, e.g. RRP, BTOR, PCR, PPER, etc.</li> <li>• ADB staff</li> <li>• DMC stakeholders</li> </ul>	<ul style="list-style-type: none"> <li>• Description of ADB's operational practices</li> </ul>
<b>(iv) What are the implications for ADB's approach to ensuring project sustainability to achieve maximum development effectiveness from its assistance / projects?</b>	<ul style="list-style-type: none"> <li>• Desk review of ADB policy documents</li> <li>• Compare ADB policies to those of other development partners</li> <li>• Compare ADB PCR prediction of sustainability to actual results in PPERs</li> <li>• Stakeholder consultation based upon the results to evaluation questions i, ii and iii</li> </ul>	<ul style="list-style-type: none"> <li>• As above.</li> </ul>	<ul style="list-style-type: none"> <li>• ADB vs World Bank sustainability outcomes</li> <li>• Does ADB have policies in place to indicate what needs to be done to enhance sustainability during all project phases; e.g. during project preparation, during project operations, and at project completion</li> </ul>

## DISCUSSION QUESTIONS

The following questions will be used to guide discussions with other MDBs regarding their approach to promoting post-project sustainability:

1. How does your organization define sustainability?
2. Does your organization have policies and procedures in place to promote project sustainability (e.g., during project planning, implementation, at completion, post completion)?
3. To what extent do the benefits of the projects you finance continue on after project implementation has been completed?
4. How does your organization monitor and evaluate project sustainability? Do you undertake post-project monitoring/evaluation of benefit flows?
5. What are the major factors affecting the achievement or nonachievement of sustainability in your projects? Do these factors vary across different sectors (e.g., rural roads and rural water vs. education or power generation)? For private vs. public goods? For revenue generating vs. non-revenue generating projects?
6. What are the implications of all this for MDBs? What should MDBs be doing to strengthen project sustainability and achieve maximum development effectiveness?