COUNTRY SYNTHESIS OF

EVALUATION FINDINGS

IN

NEPAL

March 2000

ABBREVIATIONS

ADBN	-	Agricultural Development Bank of Nepal
AOTA	-	advisory and operational technical assistances
CPRM	-	country portfolio review mission
EA	-	executing agency
EIRR	-	economic internal rate of return
FIRR	-	financial internal rate of return
NEA	-	National Electricity Authority
NRM	-	Nepal Resident Mission
O&M	-	operation and maintenance
OEO	-	Operations Evaluation Office
PSM	-	project supervision memorandum
PCC	-	project coordinating committee
PCR	-	project/program completion report
PPAR	-	project/program performance audit report
PPTA	-	project preparatory technical assistances
TA	-	technical assistance

NOTE

In this report, “$” refers to US dollars.

EXECUTIVE SUMMARY

The 1999 Country Synthesis of Evaluation Findings provides a summary of postevaluation experience in Nepal. The Country Synthesis identifies key issues affecting implementation and operation of the Bank-financed projects so that lessons learned can be used to improve the design, implementation and operation of future development projects and programs. This report on Nepal follows a previous country synthesis prepared in December 1993 and includes the findings of nine projects that have been postevaluated since 1993. This Country Synthesis is based primarily on a review of the findings of various reports prepared by the Operations Evaluation Office (OEO). Because all of the postevaluated projects were approved prior to 1989, the 1999 Country Synthesis also draws upon the 19 project/program completion reports (PCRs) on recently completed projects and the report of the 1998 Country Portfolio Review Mission (CPRM) to identify more recent trends in project performance. The report covers the Bank's operations in Nepal as of June 1999.

Of the 32 postevaluated projects, 50 percent were considered generally successful, 25 percent partly successful, and 25 percent unsuccessful. By approval period, however, the percentage of generally successful projects has dropped significantly from the 1970s to the 1980s, from 67 percent to 35 percent, matched by a proportionate increase in the number of partly successful projects, and a slight decrease in unsuccessful projects. PPAR findings suggest the decline in the percentage of projects rated generally successful since 1980 may be due to an increase in the number of more complex social infrastructure projects and decline in generally successful ratings of agriculture projects.

The key factors affecting the implementation performance included (i) weaknesses in project preparation and design; (ii) lack of stakeholder participation; (iii) insufficient assessment of institutional environment and EA capabilities; (iv) weaknesses in Bank supervision; (v) inadequate assessment of policy and sector issues. A major problem common to most projects is implementation delays. The average delay was about 2.3 years, or a 48 percent time overrun. Factors that contributed to implementation delays were (i) slow and complex procurement processes of the Government and the EAs; (ii) changes in project scope; (iii) use of inexperienced contractors; (iv) delays in the release of counterpart funds and compliance with loan covenants; and (v) overestimation by the Bank of the capabilities and commitment of the EAs. In terms of project cost, sixty-six percent of the postevaluated projects were completed below appraisal budget while only 28 percent had cost overruns.

The Country Synthesis identified important issues for the future, among which were: (i) beneficiary and private sector participation; (ii) poverty alleviation; and (iii) strengthening institutional capacity of the Government/EAs to implement projects.

Among the key lessons learned across projects and sectors were:

(i) Bank fact-finding and appraisal missions require more rigorous feasibility studies, more in-depth sector analysis, and more extensive fieldwork. More resources and focus should be given to processing missions. TA outputs, in particular, require improved supervision to ensure that feasibility studies are more realistic and to enhance Government accountability for and ownership of TA projects.

(ii) Participation of local communities during both design and implementation is crucial for project sustainability and success. Bank review missions should encourage frequent and rigorous interaction between EAs and beneficiaries.

(iii) Project design should institute appropriate O&M mechanisms and properly delineate responsibilities. Political will to support sustained O&M through recurrent budget allocation should be realistically assessed and supported by Government operational guidelines and policies.

(iv) The institutional capability of the EA to supply qualified staff and services should be more rigorously assessed. Project design should consider alternative approaches, such as strengthening sector institutions prior to the implementation of loan projects or simplifying scope, possibly with fewer agencies involved or smaller loans.

(v) Project planning and design should consider the issues of good governance and anti-corruption to contribute to a more favorable project implementation environment.

(vi) Relying on administrative sources of information gathered in Kathmandu rather than on information gathered from field investigations can lead to inaccurate assessment of local needs, inappropriate project siting, and inadequate technical design.

(vii) To maximize project impact on poverty reduction, project design should include specific measures targeting the poor.

(viii) Project design should emphasize the role of women in development by including components that specifically target women both as direct beneficiaries of projects and participants in their implementation.

(ix) Stronger environmental monitoring programs, particularly for agriculture and large infrastructure projects are needed in project design, including the collection and/or use of environmental baseline and monitoring data. Environmental monitoring should focus more on assessing whether environmental impacts have reduced project effectiveness and sustainability.

(x) Project and TA designs need effective benefit monitoring and evaluation systems and performance indicators. Appraisals should make clear linkages between project inputs and expected benefits in the project framework.

(xi) Consultants with prior work exposure in Nepal, or in similarly remote, mountainous, and human resource-constrained areas are more effective. The Bank should more carefully evaluate the capacity of local contractors and project design should consider special interventions for strengthening the capacity of local contractors.

(xii) Bank review missions need to more closely supervise the quality of project implementation and construction work despite remoteness of the project areas.

(xiii) Private sector involvement should be encouraged especially in the marketing, distribution, and maintenance of project outputs.

(xiv) Greater staff resources are needed to effectively formulate, supervise, and evaluate projects in Nepal and for site inspection outside Kathmandu. Without such resources,

the Bank could consider concentrating its existing resources on improving the implementation of ongoing projects, perhaps deferring new projects until such time as implementation performance has significantly improved.

I. BACKGROUND

A. Introduction

1. A country synthesis of evaluation findings summarizes the key findings and lessons learned from the evaluation of Bank-financed projects and programs in order to assist Bank staff in designing new projects/programs and implementing ongoing assistance.[1] The country synthesis also examines trends in project performance to assess the extent to which the Bank has learned from past experience. This report on Nepal follows a previous country synthesis prepared in December 1993 and includes the findings of nine projects that have been postevaluated since 1993. This country synthesis is based primarily on a review of the findings of various reports prepared by the Operations Evaluation Office (OEO).[2] Because all of the postevaluated projects were approved prior to 1989, this report also draws upon the project/ program completion reports (PCRs) on recently completed projects[3] and the report of the 1998 Country Portfolio Review Mission (CPRM)[4] to better assess the impact of past project experience on current practices. This synthesis of Bank evaluation findings, however, is necessarily limited since the findings are based on project design and implementation undertaken several years ago and as such may not reflect the design and implementation of ongoing projects.

B. Bank Operations in Nepal

2. Since Bank lending operations in Nepal began in 1969, 94 loans totaling $1.63 billion have been approved, including 89 in the public sector and 5 totaling less than $50 million in the private sector. Except for one blended loan deriving partly from ordinary capital resources, all public sector projects were funded from the Bank's Special Funds resources.

3. Bank loans to Nepal have been concentrated largely in the agriculture and energy sectors. Agriculture and agro-industry lending accounted for $777.5 million or 49 percent of total loans to Nepal as of the June 1999 (Appendix 2). The energy sector received $345.9 million or 22 percent of total lending, followed by transport and communications with 14 percent and social infrastructure with 9 percent. The agriculture sector also received the largest number of loans: 50 of the total 89 public sector loans or approximately 56 percent.

4. As of the June 1999, the Bank had provided 212 technical assistance (TA) grants for a total of $85.7 million of which 39 percent was for project preparation and 61 percent for advisory

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[1] In this report, "projects" subsequently refers to both project and program loans.

[2] OEO was formerly known as the Postevaluation Office. The reports reviewed include project/program performance audit reports (PPARs), reevaluation studies, impact evaluation studies, and special evaluation studies (Appendix 1).

[3] The present country synthesis reviewed 19 PCRs, prepared between 1995 and June 1999; the most recent of these projects was approved in 1993 (Appendix 1, Table A1.2).

[4] The Nepal Resident Mission undertook the second CPRM in September 1998. It is acknowledged that the CPRM generally focuses more on problems rather than project successes, and as such likely understates the positive developments in ongoing projects.

purposes (Appendix 2). The agriculture sector received the bulk of TA funding (57 percent), followed by the energy (10 percent) and social infrastructure (10 percent) sectors.

5. Seventy-four of the 89 public sector loans have been closed, and 32 loans or 34 percent of the total have been postevaluated. These postevaluated projects were approved during the period 1970-1988 and were completed as of June 1995, with the last PPAR prepared in December 1998. Of the 32 postevaluated projects, project performance audit reports (PPARs) rated 16 (50 percent) generally successful, 8 (25 percent) partly successful, and 8 (25 percent) unsuccessful. Nepal's unsuccessful rating of 25 percent compares unfavorably with Group A countries' average performance (15 percent unsuccessful) and Bank-wide performance (11 percent unsuccessful).[5] By project cost, 38 percent were generally successful, 21 percent were partly successful, and 41 percent were unsuccessful (Appendix 3).

6. Table 1 summarizes the performance ratings of postevaluated projects by period of approval. As reported in the 1993 Country Synthesis, there continues to be deterioration in generally successful rates, possibly due to an increase in the number of more complex social infrastructure projects and some decline in the success rate of agriculture projects. PPAR findings on the nine projects postevaluated since the 1993 Country Synthesis show that the percentage of generally successful projects declined from 57 percent to 33 percent while that of partly successful projects increased from 17 to 44 percent. The proportion of unsuccessful projects has decreased somewhat from 26 to 22 percent (Appendix 3).

7. By approval date, the percentage of generally successful projects dropped significantly from the 1970s to the 1980s, from 67 percent to below 40 percent, matched by a proportionate increase in the number of partly successful projects, and only a slight percentage decrease in unsuccessful projects.[6] Most recent PCR ratings of six projects approved from 1990 to 1993 suggest some improvement in project performance as these recent PCRs rate three projects generally successful, two partly successful and one unsuccessful.[7]

Table 1: Performance Ratings of Projects by Approval Period

Approval Period	Generally Successful		Partly Successful		Unsuccessful		Total
	No.	%	No.	%	No.	%	No.
1970 – 1979	10	67	1	6	4	27	15
1980 – 1989	6	35	7	41	4	24	17
Total	16	50	8	25	8	25	32

8. PPAR findings suggest a decline in the performance of agriculture projects as only 5 of 13 postevaluated agriculture projects approved from 1980 to 1988 were rated generally successful, compared with 5 of 8 agricultural projects approved from 1970 to 1979 (Appendix 3).[8] This observation is reinforced by the results of 8 PCRs for agriculture sector projects, all approved from 1985 to 1991, 7 of which were rated partly successful and 1 unsuccessful.[9]

[5] Group A countries have a gross domestic product per capita of less than $600 a year.

[6] This is consistent with the average performance of Bank-wide projects which reports a decline in generally successful projects from 58.8 percent in 1970s to 52.6 percent in 1980s.

[7] OEO has observed, however, that PCR ratings tend to be more optimistic than PPAR ratings.

[8] With respect to ongoing projects, the 1998 CPRM confirms that several factors contributing to disappointing results in the agriculture sector remain including weak institutional commitment, support and capacity, weak project

9. Of the 32 postevaluated projects, all three in transport were found generally successful, while three social infrastructure projects exhibited comparatively weaker performance, with two projects rated partly successful and one unsuccessful (Appendix 4, paras. 35 and 39).[10] While there may be a more rigorous or critical approach to more recent PPARs and PCRs, the tables in Appendix 5 detailing design implementation concerns common to many postevaluated projects suggest that such factors affecting performance have consistently been observed since the first postevaluation in 1981.

Table 2: Performance Ratings of Projects by Sector

Sector	Generally Successful		Partly Successful		Unsuccessful		Total
	No.	%	No.	%	No.	%	No.
Agriculture & Agro-Industry	10	48	6	29	5	24	21
Energy	3	75	0	0	1	25	4
Industry	0	0	0	0	1	100	1
Transport & Communications	3	100	0	0	0	0	3
Social Infrastructure	0	0	2	67	1	33	3
Total	16	50	8	25	8	25	32

II. IMPLEMENTATION EXPERIENCE AND PERFORMANCE RESULTS

10. This section summarizes key postevaluation findings based on a review of project design, implementation and development impact.[11] Appendix 5 lists the factors affecting implementation performance of projects. Among the factors cited, weaknesses in technical design and insufficient assessment of EA capabilities appear to be among the most common problems.

A. Project Formulation and Design

11. Over 70 percent of the projects postevaluated, including all those in social infrastructure, livestock, and irrigation, had weaknesses in project formulation and technical design that adversely affected implementation and achievement of targeted benefits (Appendix 5, Table A5.6). Shortcomings in design resulted in changes in project scope, ranging from minor modifications to significant reductions in or deletion of components, which often led to significant delays and cost underruns/overruns, and, most important, to reductions in expected project

supervision, staff shortages, frequent transfer of project staff, and unavailability of counterpart funds (para. 64, page 24).

[9] The Sixth Agricultural Credit Project, the most recently approved agriculture sector project among the seven covered by PCRs, was rated unsuccessful.

[10] PPAR findings suggest that this is partly attributable to inadequate project preparation and design, particularly with respect to support for O&M, stakeholder participation, and institutional issues (Appendix 5, Tables A5.1, A5.2 and A5.4).

[11] Appendix 4 summarizes postevaluation findings by sector.

benefits. Project designs were frequently flawed because they lacked (i) adequate consultation with beneficiaries and local communities; (ii) proper assessment of the project environment including environmental, logistical, and technical constraints/conditions and institutional capacities of the executing agencies (EAs); (iii) realistic estimates of operation and maintenance (O&M) requirements; (iv) monitoring and evaluation mechanisms; and/or (v) sufficient understanding/analysis of the sector, macroeconomic policies, and the need for prior policy reforms. More than half of the 32 PPARs indicated that the Bank's design of projects was weak (Appendix 5, Table A5.6).

12. PPAR findings indicate the importance of a design and scope that are appropriate to the needs of beneficiaries and to the remote hill locations. Key to development of appropriate design and scope is the accurate assessment of the Government's, the EA's and the local community's commitment to and capacity for project implementation, operation, and ongoing maintenance. PPAR findings also indicate that poor project performance often resulted from insufficient consideration of the topography and unique physical, institutional, socioeconomic, and cultural conditions in Nepal. Inadequate feasibility studies frequently led to projects too ambitious in size and/or scope. Designs that should have been simple became too complex, too capital intensive, and less cost effective. PPAR findings suggest that some project designers lacked basic knowledge of the project areas and the beneficiary community, given that many designs were inappropriate to local needs and conditions. PPAR results point to insufficient Bank involvement in consultancy input during the crucial phases of preparation, including visits to and selection of project site and technology. Shortcomings in project design and institutional assessment also reflected the limited experience of consultants with Nepal, and the limited time and resources devoted by the Bank and its consultants to sector analysis and fieldwork.

13. Postevaluation results also attribute weak project design to poor data availability and limited time spent by missions in the field. For example, postevaluation of the Hill Irrigation Project found the duration of the feasibility study fieldwork insufficient, as several schemes that were located in areas accessible only after hours of trekking were not adequately assessed at appraisal and had to be revised during implementation. Similar findings were made in the postevaluation of the Mini-Hydropower Project where it was observed that none of the project's review missions had visited any of the six remote sites.[12] Despite reformulation of projects, as in the case of the Sagarnath Forestry Development, Second Hill Irrigation and the Mini-Hydropower projects, designs sometimes remained inappropriate, and in several instances problems were compounded when critical components were deleted. In four out of eight postevaluated irrigation projects, lack of careful assessment of hydrological data such as river discharge and sediment load, and of other environmental conditions, adversely affected the O&M of the schemes.

14. PCRs and the CPRM note that poor project preparation and design continue to be a problem, though recent PCRs indicate that involving local groups and communities in the design of water supply, irrigation, and roads projects has contributed to improved results.

B. Project Implementation and Supervision

[12] The OEO's file review also suggests that the feasibility consultants made no site visits to the six mini-hydro sites developed.

1. Implementation Period

15. A major problem identified at postevaluation and common to all projects are long implementation delays. The average delay was about 2.3 years, or a 49 percent time overrun (Appendix 6). Road projects exhibited the longest implementation delays owing to the slow performance of contractors, often because the appraisal underestimated the impact of the projects' remote location, and overestimated the availability of suitable equipment and experienced personnel. Over the years, however, there has been some improvement in the implementation period. While for projects approved from 1977 to 1980, the average implementation delay was 2.7 years (55 percent), for projects approved since 1980, it was 2 years (41 percent).

16. Over half of the postevaluated projects experienced delays due to the slow and complex procurement processes of the Government and the EAs. The key factors contributing to slow procurement were inadequate coordination among the EAs and lack of approval authority for, and resulting delays in, prequalification, tendering, contract award, and consultant recruitment. Other factors that contributed to longer implementation periods were (i) changes in project scope, often because of poor project preparation; (ii) use of inexperienced contractors; (iii) delays in the release of counterpart funds and compliance with loan covenants; and (iv) overestimation by the Bank of the capabilities and commitment of the EAs. Project complexity and accessibility to Bank supervision may also have influenced implementation. The Hill Agriculture Project was implemented efficiently and only six months behind schedule because of its relatively small size and the proximity of the four hill districts to Kathmandu, which facilitated access and communication. Also of assistance in implementation was a Project Supervision Memorandum (PSM)[13] summarizing operational aspects of the Project including financing schedules, staff requirements, procurement quantities and costs, and formats for progress and financial reports.

17. More recently, six of 19 PCRs reviewed and completed since 1995 note implementation delays caused by the expiry of the Nepal-India Trade and Transit Treaty in March 1989 and resulting border closings. These PCR findings also suggest that weaknesses in assessment of remote project sites and of the capabilities and commitment of the Government and the EA at appraisal has continued to affect implementation. Almost half of the recently completed PCRs cite that slow progress and poor performance by contractors were due to designs that failed to adequately assess the environmental and logistical difficulties in the project area. The 1998 CPRM confirms that problems with slow decision making within EAs and the Government continue.[14] It also reports that implementation of tourism, social infrastructure, and agriculture projects continues to be affected by recruitment delays, shortage of project staff, weak interagency coordination, lack of Government commitment to implement policy reforms, and weak project management by the EA. The 1998 CPRM also notes the importance of better project preparation, including timely preparation of designs and cost estimates, advance action for appointment of project staff and establishment of implementation units, advance recruitment

[13] Over the last few years, the PSM is being made mandatory for all projects.

[14] The 1998 CPRM reports significant delays in the Third Livestock, Upper Sagarnatha Agricultural Development, and Tribhuvan International Airport Improvement projects due to slow and complex Government procedures for recruitment of consultants and contract awards. The key issues remain the low levels of assigned authority for prequalification, consultant selection, and contractor award, which contributes to slow decision-making. The 1998 CPRM reports that Nepal's Financial Controller General's Office will study and compile a list of current best practices on delegation of authority in the Government's development ministries and issue a circular for Cabinet approval in 1998 and for implementation by 1999 (para. 30, page 9).

of consultants, more direct and effective Government involvement, and earlier preparation of procurement documents.

2. Project Cost

18. Of the 32 postevaluated projects, 66 percent were completed below appraisal budget; only 28 percent had cost overruns. Appendix 6 summarizes project costs and budget deviations.

Table 3: Average Cost Overrun/Underrun
As of December 1998

Sector	Average Cost Overrun		Average Cost Underrun		No. of Projects without Cost Variation	Total No. of Projects
	No.	%	No.	%		
Agriculture	5	34	15	38 [a]	1	21
Energy	1	47	3	21	0	4
Industry	1	82	0	0	0	1
Transport & Communication	2	34	1	1	0	3
Social Infrastructure	0	0	2	16	1	3
Total	9	41	21	29	2	32

[a] Excludes program and credit loans.

19. All postevaluated projects approved from 1976 to 1985 experienced cost underruns caused largely by (i) deletion and modification of project components, (ii) depreciation of the Nepalese rupee,[15] and (iii) overestimation of contingency costs. The three forestry sector projects had the most significant cost underruns (over 50 percent) because of major changes in scope, including reduction in plantation size, deletion of support components, and procurement of simpler and less extensive equipment. These changes in scope stemmed primarily from inadequate feasibility studies and unrealistic project designs that lacked sufficient understanding of the soil conditions, topography, limited road access, the EA's capability to manage multiple project components, and the sociocultural conditions.[16]

20. Seventy percent of the projects with significant cost overruns were approved before 1977. These projects, which were in the agriculture and agro-industry, energy, and road transport sectors, were adversely affected by the worldwide inflation resulting from the 1973 oil crisis. Increases in cost of civil works and consulting services due to changes in project scope also contributed to the cost overruns.

3. Bank Supervision and Monitoring

[15] Cost underruns as a result of rupee devaluation frequently result in loan savings or contract awards that are much less than the targets.

[16] PCRs of recently completed projects show that cost underruns continue, and the 1998 CPRM confirms that underruns have occurred for the 10 of the 24 ongoing projects in Nepal because of project reformulation and to a lesser extent due to currency devaluation (Appendix 8 of CPRM).

21. The need for closer Bank supervision is cited in nearly 60 percent of postevaluated projects. PPAR findings indicate that infrequent, short, poorly timed, unfocused or inappropriately staffed review missions have adversely affected project performance, particularly in irrigation, forestry, livestock, and crop intensification projects. In several instances, review missions concentrated more on procurement issues and causes of implementation delays rather than technical issues, and this ultimately weakened the projects' development impact. In addition, PPARs note that Bank missions often had multiple and diverse objectives (frequently combining project fact-finding with PCRs, TA implementation, and project review) that are difficult to achieve within short periods in a country as logistically challenging as Nepal. Postevaluation results suggest that the shortage of time and staff resources, particularly technical expertise, has led to Bank staff focusing review missions on discussion with EAs in Kathmandu at the expense of investigating problems in the field. The Nepal Resident Mission (NRM) notes that one of the main reasons for poor project design and ineffective supervision during implementation is the lack of adequate Bank staff inputs and over reliance on consultants' work particularly in respect of TA projects. On occasion, inadequate Bank supervision of TAs for project preparation and capacity building has led to poor design and ineffective capacity building.

22. Examples of weak supervision and field support include the first power project (the Gandak-Hetauda Power Project), where the Bank did not follow up the consultant's work in the field until four months before work was to end. Similarly, during implementation of the Third Power Project, the Bank decided to delete the 33-kV subtransmission component without full comprehension of the adverse impact on the total project, viz., facilities that would remain unutilized for 3-5 years, suggesting inadequate assessment of local conditions at the time of appraisal.

23. PPAR findings point to the lack of Bank attention to and follow up on project components in the first and second hill irrigation projects. This has resulted in major modifications in the original design, with resultant implementation delays and reductions in benefits. Project components essential to sustain irrigation in mountain areas received minimal attention or were not implemented, in part because the review missions lacked appropriate expertise. In the case of the Hill Irrigation Project, increasing damage by floodwaters to the diversion weir was not addressed despite repeated review missions, averaging almost two each year, suggesting that the problem lay in the type rather than the quantity of supervision. PPAR findings emphasize that review missions should have a mix of technical and/or sector expertise to undertake a more comprehensive review and follow-up of project status. PPAR findings also indicate weak Bank supervision of agricultural credit projects, particularly in monitoring the institutional performance of the Agricultural Development Bank of Nepal (ADBN) and its compliance with covenants.[17]

24. Most recent PCRs and CPRM findings suggest that supervision problems continue, as ongoing projects are often reviewed only once a year and for only a short time. For instance, the 1998 CPRM observes that a recent Bank mission for the Second Tourism Development Project was for only five days despite the project having major implementation problems. The CPRM acknowledges that, owing to the infrequency and shortness of review missions, some identification and resolution of project problems may not be timely, resulting in project delays, poor disbursement performance, and ineffective implementation.[18] In OEO's view, this argues

[17] The 1999 Country Operational Strategy Study for Nepal notes that the effectiveness of Bank interventions has been diminished by a failure to enforce loan covenants related to policy, institutional, and financial issues that are critical to effective project implementation (Executive Summary, page [ii]).

[18] Memorandum of Understanding between the Government of Nepal and the 1998 CPRM, (para. 23, page 7).

for greater allocation of Bank resources to project site visits and more proactive monitoring of problems in the field. This could be achieved through reinforced missions from Headquarters or by developing and strengthening the resources of the Resident Mission.[19] This also argues for mechanisms to be established as part of project design to ensure frequent, field-based benefit monitoring.

4. Institutional Arrangements

25. PPAR findings highlight the limited capabilities of EAs to effectively implement projects, particularly in the agriculture, social infrastructure, and energy sectors (Appendix 5, Table A5.2). PPAR findings indicate that the EAs in water supply, transport, and livestock projects performed satisfactorily. Factors affecting EA performance include (i) staff shortages and high turnover of staff and project managers,[20] (ii) inadequate delegation of authority and resulting delays in decision-making; (iii) unfamiliarity with Bank procurement procedures, (iv) lack of expertise and previous experience in similar projects, (v) weak interagency coordination, and (vi) lack of explicit and agreed upon roles and responsibilities of various project participants.

26. In the case of the Jute Development Project, for example, working relationships between Government agencies and the EA were not adequately defined during appraisal, and the EA lacked direct authority over the jute mills. In the Agriculture Program loan, project designers focused more on procurement arrangements and loan disbursement rather than on the capabilities of the concerned agencies and the existence of mechanisms to undertake the necessary policy reforms. Projects coordinating committees (PCCs) formed under six postevaluated projects were inactive and ineffective because their mandate and responsibilities were not clearly defined at appraisal. While a decentralized management approach to projects was conducive to speedy implementation, as in the case of the Hill Agriculture Development Project, the high-level PCC was not effective in coordinating the activities of the various EAs and synchronizing the overall development program.

27. There has been an improvement in the performance of the EA for rural water supply projects. The EA of the First and Second Rural Water Supply Sector Projects was effective in implementing the projects, designing systems, and supervising construction. Two recent PCRs in rural water supply indicate that the EA was successful in promoting community participation through the establishment of water user committees prior to subproject approval.

28. Twenty-one of the 32 PPARs point to the need for closer attention to the selection of project EAs, including strengthening EA capabilities prior to the commencement of project work and developing EAs' systems of regular project monitoring and evaluation. Based on the review of several recent PCRs, and as confirmed by the 1998 CPRM, project coordination and monitoring by the EAs remain weak. The 1998 CPRM reports that inadequate staffing of projects is an endemic problem, particularly in participating district line agencies where posts are often vacant. High rates of staff turnover and lack of operational autonomy are major concerns as they undermine the institutional capabilities of the EAs. Authority for

[19] NRM staff participated in a recent World Bank loan review mission which comprised about five mission members, which compares with one-person missions usually fielded by NRM as well as HQ divisions.

[20] The 1998 CPRM indicated that inadequate staffing of projects remains a problem, though the CPRM reported a decrease in transfers of project managers since the 1997 CPRM. The Bank has informed the Government that transfers of project managers and other key project staff without proper justification and without consulting the Bank will be sufficient cause for suspension of the release of loan funds (para.10, page 3).

prequalification, award of contracts and consultant selection remains too limited at the Project Director level and is related to a lack of willingness of ministries to delegate authority.[21]

5. Performance of Consultants/Contractors

29. Nearly half of the PPARs find the performance of consultants and contractors less than satisfactory, with many citing poor quality construction of facilities affecting the sustainability of projects. Key factors affecting performance included contractors and consultant inexperience, including technical incompetence and lack of appreciation for Nepal's physical environment; and lack of supervision and guidance of contractors on the part of the EA and the Bank.[22] Recent PCRs confirm this finding, with only 9 of 19 PCRs reporting satisfactory contractor/consultant performance. Issues cited by these PCRs include inexperienced local contractors and inadequate site supervision. More recently, the 1998 CPRM reports that poor contractor performance in recent social infrastructure projects continues, stemming from inadequate financing and poor management capability, which occurs when a prequalified contractor has taken on more contracts than it is able to finance and manage effectively.[23]

6. Effectiveness of Technical Assistance

30. Twenty-five of the 32 postevaluated projects were supported by Bank technical assistance, of these, 9 were preceded by project preparatory TAs (PPTAs), 9 had piggy-backed advisory and operational TAs (AOTAs) while 7 had both. Most of the agricultural and social infrastructure projects were developed through PPTAs; infrastructure projects typically had accompanying AOTAs. Most of these advisory TAs were for capacity building and institutional strengthening involving the review of organizational structures, preparation of operational guidelines, policies and procedures and development of training programs for EA staff.

31. OEO's review of PPARs with data on TA outcome indicates nearly half of the 25 TAs had less than satisfactory or sustainable outcomes. Major weaknesses noted in two PPTAs were: (i) lack of knowledge of local environment; (ii) insufficient time in the field; and (iii) lack of direct contact with project beneficiaries. Poor performance of AOTAs was largely attributable to: (i) consultants' lack of the appropriate technical, sector or country expertise; (ii) high turnover of project staff; (iii) lack of qualified counterpart staff; and (iv) limited focus on institution building (Appendix 7). Some TAs were satisfactorily executed but their impacts were not thought sustainable because of inadequate skills transfer and recommendations not implemented due to project staff turnover and inexperience. Several PPARs reported that operating manuals and guidelines prepared by consultants were not in use, possibly indicating inappropriate material or the low priority given by the EA staff to the AOTA.

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[21] As reported by the Financial Controller General's Office and confirmed by 1998 CPRM (para. 30, page 9).

[22] The latter led to inadequate analysis of technical design and inappropriate site selection in numerous projects due to failure to sufficiently consider the logistical and operational constraints of working in a remote and mountainous environment.

[23] To address this problem, the 1998 CPRM recommends that shortlisted contractors be required to detail their ongoing work so that the tender evaluation committee can better assess their capacity to take on additional work. (para. 47, page 16)

C. Development Impact

1. Operational Performance

32. PPAR results indicate that the physical components of projects were generally constructed as planned, though the operational performance of most projects fell far short of projections owing largely to flaws in project design and to an inhospitable project environment—specifically weak institutions and inappropriate policies. PPAR findings indicate that projects tended to focus on providing the physical infrastructure rather than on the institutional development, support services, and/or policy reforms required for the realization of project benefits as stated at appraisal. In particular, the physical components of projects, particularly those in the agriculture sector, were heavily dependent upon related factors—credit, seed and fertilizer inputs, and agricultural extension services—to realize benefits, but these inputs and activities, even if included in project design, were often not accessible to many targeted beneficiaries.

33. In the case of many irrigation projects, physical facilities were improved, but the projects did not adequately develop and strengthen the capacities of farmers to manage both their crops and complex water delivery systems, which resulted in lower crop productivity than projected at appraisal. In education projects postevaluation results demonstrate that the provision of physical infrastructure and inputs will not result in significant benefits at the classroom level unless an appropriate educational environment, including reasonable class size, workloads, and teacher incentives—conducive to the transfer and application of knowledge and skills—is established.

2. Institutional Impact

34. In more than half of the postevaluated projects, institution building was not as great as envisaged at appraisal. This was particularly evident in agriculture and energy projects, where institutional strengthening TAs were not as effective in building EA capacities as planned. For example, despite substantial assistance for capacity building, the operations and financial performance of EAs such as the Agricultural Inputs Corporation, and ADBN showed minimal improvement. A special study on the effectiveness of ten advisory TAs for capacity building in the social sectors of Nepal concludes that they had only a marginal impact on institutional strengthening. The training components of most TAs had unsatisfactory results because of lack of Government commitment to provide funds, weak management by the EAs, and inadequate Bank supervision. Special study findings suggest that most of the TAs lacked (i) adequate preparation and design, (ii) follow up on the part of the Bank and Government agencies to ensure that output was utilized, (iii) provision for beneficiary participation; and (iv) sufficient counterpart staff and budget.

35. The NRM has noted that, although agriculture sector projects have capacity building components for beneficiary communities/institutions, EAs often give implementation of such components secondary importance as it demands frequent and rigorous interaction with beneficiaries. Generally, EAs propose ritual type of training activities in their annual programs primarily for meeting targets only. Beneficiaries lack information and eventually lose interest in

such projects, which limits their ownership and results in poor O&M of project facilities and limited development impact.

3. Economic Impact

36. Of the 23 postevaluated projects for which economic internal rates of return (EIRRs) were recalculated, 14 projects with EIRRs of at least 10 percent were considered economically viable. More than three fourths of these postevaluated projects, however, had actual EIRRs substantially below appraisal estimates (Appendix 8).[24] Principal factors lowering EIRR were reduced project scope (and resulting decline in project benefits), low capacity utilization achieved, increased project cost, and implementation delays. In the agriculture sector, the significant declines in EIRR from levels expected at appraisal were attributed to lower real prices of agricultural food products, higher cost of production, and shortfalls in the expected farm production. In the irrigation sector, major factors responsible for lower returns included long implementation delays, higher construction costs, lower agricultural productivity, and lower crop prices.

37. There appears to be some improvement in recent years, as nine of 12 recently completed PCRs with EIRR recalculations find the projects economically viable, their EIRRs ranging from 12 to 29 percent. As Appendix 8 shows, however, EIRR calculations in two thirds of the PCRs reviewed were higher than subsequent PPAR results, suggesting that PCR findings may be too optimistic.

4. Socioeconomic Impact

38. Some of the positive socioeconomic impacts noted in more than 75 percent of the PPARs include (i) increased family income and employment; (ii) increased opportunities for social interaction and community life; (iii) improved standards of living with improved electricity and water supply; (iv) improved food security of small farms; (v) less urban migration; and (vi) improved access to agricultural extension services, health facilities, schools, and Government centers.

39. Despite the high percentage of projects exhibiting socioeconomic benefits, however, PPAR findings indicate that these impacts were significantly less than anticipated, or disproportionately distributed to the more wealthy, particularly medium to large farmers. Socioeconomic benefits were less than expected in part because of substantial reduction in project scope (owing largely to poor project conceptualization and design) and in part because of the absence of timely, complementary support programs (agricultural extension, load promotion, credit, etc.) to make best use of the projects' physical infrastructure. In the Mini-Hydropower Project, for example, the broad socioeconomic benefits expected at appraisal did not materialize due to the absence of a program to develop productive income-generating schemes requiring electricity in subproject areas, which had been agreed to by the EA and the Government. With respect to benefits distribution in aquaculture projects, as another example,

[24] Per Bank Guidelines on the Economic Analysis of Projects, a project is considered economically viable if the EIRR exceeds the economic opportunity cost of capital estimated at 10 to 12 percent for all member countries. Of the 23 PPARs with EIRRs, 17 had EIRRs below the appraisal projection; only 11 of those, however, were below 10 percent.

originally targeted beneficiaries could not utilize the credit, inputs, and services made available by the projects, since most did not own a pond or land to put one on, and since Government policy on leasing water bodies also restricted access to the poor.

40. A review of 19 recently completed PCRs also suggests that the socioeconomic impacts achieved were significantly less than anticipated owing in part to insufficiently targeted designs and lack of beneficiary participation.

5. Environmental Impact

41. Of the 24 PPARs with any discussion of environmental impacts, 5 report significant positive impacts, 3 report significant negative impacts, 2 report mixed results, and 14 report minimal environmental impacts. PPARs and more recent PCR findings point to the positive effects of forestry plantation projects, including reforestation, reduced soil erosion, and improvement in conditions for birds and other wildlife. Biogas technology components of agriculture sector projects have helped to reduce the consumption of fuel wood, kerosene, and chemical fertilizer while recycling waste materials. The Agriculture Program loan, which targeted the disposal of obsolete pesticides, also had positive effects.

42. Three PPARs, however, note negative impacts of projects on the environment due in part to deficiencies in project design. For example, in the (First) Livestock Development Project, livestock improvement programs contributed to the buildup of animals and consequently increased the pressure on grazing resources resulting in encroachment on forest areas and degradation of the environment. In two projects, poor selection of project sites and inadequate feasibility studies contributed to poorly designed irrigation systems and road alignments, which exacerbated soil erosion and led to landslides.

43. Generally, the PPARs reviewed did not address how the projects' environmental impacts have either positively or negatively impacted project socioeconomic benefits. To date, the absence of baseline environmental data, together with project designs and postevaluation efforts that do not have built-in collection and/or use of environmental monitoring data, make it difficult to meaningfully evaluate the linkage between environmental impact and project effectiveness/sustainability.[25]

6. Gender Impact

44. While few of the projects postevaluated emphasized the role of women in development either as beneficiaries or as participants in implementation, PPAR findings indicate several positive impacts on women. Agricultural projects in forestry, livestock, and aquaculture have led to women participating in related income-generating activities such as nursery operations, weeding, grass cutting, sericulture, beekeeping, cut flower industries, basket weaving, and fishing. In the financial sector, PPARs note that women have indirectly benefited through the trickle-down effect of agricultural credit projects; as credit is made available, investments in both farm and nonfarm employment increase, and work opportunities for women expand. In the social sector, PPARs observe that higher household income contributed to higher female

[25] PPAR efforts toward more rigorous review of environmental impact on project effectiveness is dependent on project design that includes collection baseline and interim environmental data.

participation at all levels of education. While these observations indicate women have indirectly benefited from various projects, gender impact would have been more favorable if project design had included measures that target resources to women.

7. Sustainability

45. Of the 32 postevaluated projects, 8 were found to be unsustainable after completion owing largely to (i) inadequate design; (ii) poor quality construction; (iii) institutional weaknesses; (iv) lack of project ownership by the EAs; and (v) inadequate support for O&M. In the case of the two postevaluated education projects, poor workmanship of the contractors and inadequate project formulation and design resulted in the deterioration and underutilization of campus facilities. Weak institutional environment, including the absence of qualified counterpart staff, lack of expertise, poor technical/managerial capabilities, insufficient interagency coordination, high turnover of staff, adversely affected project sustainability. All postevaluated agricultural credit projects appear largely unsustainable because of institutional weaknesses including poor management, lack of effective supervision and inadequate monitoring and collection of loans.

46. Another major problem that has affected sustainability of project benefits is inadequate financial and institutional support for ongoing O&M. PPAR findings link weak O&M to (i) inadequate site investigation and feasibility studies leading to underestimation of maintenance costs; (ii) lack of beneficiary participation in project design and resultant disinterest in project upkeep; (iii) inaccurate assessment of the EA/Government/beneficiaries' capacity to and self-interest in supporting O&M; and (iv) no clear delineation of responsibilities for O&M, including recurrent budgeting for routine maintenance. In the case of the Kankai Irrigation Project, for example, the budget for O&M was insufficient because the Government did not remit to the Project irrigation service fees it collected. Campus facilities constructed under the Vocational Education Project deteriorated after the Government cut its allocation for the school's O&M by 52 percent in the first three years of operation. Inadequate budget and no explicit responsibility for maintenance were problems noted in the Tribhuvan International Airport Project. PPAR findings indicate that community participation is particularly important for the transfer of O&M responsibilities from Government agencies to the beneficiaries. Moreover, the ability of the private sector to utilize and support the projects also contributes to successful performance and long-term sustainability.

III. KEY ISSUES FOR THE FUTURE

A. Beneficiary and Private Sector Participation

47. Many of the projects postevaluated had little or no provision for beneficiary participation in their preparation and implementation. In the case of the (First) Livestock Development Project, inadequate participation in planning by local institutions and potential beneficiaries led to unrealistic objectives, overestimated benefit projections, and investment in overly sophisticated technologies that could not be supported with available staff. Similarly, the absence of community involvement in the Rural Water Supply Sector Project led to a system

designed solely for public standpost distribution that could not meet users' demands and subsequently undermined their interest in maintaining the system. It is encouraging to note that PCRs of the two recently completed water supply projects suggest that efforts to increase community participation have improved project results (Appendix 4, page 8, para. 40)

B. Poverty Alleviation

48. PPAR and PCR findings suggest that many Bank projects designed in the 1970s and 1980s may have had limited effects in alleviating poverty. For example, medium and large landholders tended to be the main beneficiaries of agriculture projects. Benefits accrued disproportionately to the relatively more affluent and educated in part because the benefits from the physical components of projects were often dependent on effective use of support inputs—credit, seed, fertilizer, pesticides, and sound agricultural practices—which in turn assumed that target beneficiaries had sufficient collateral, working capital, and technological sophistication to access these inputs. Lack of specific measures targeting the poor has sometimes increased income disparities, pointing to the need for clear identification of target groups followed by in-depth socioeconomic analysis of these groups and clear identification of their needs. Project designers should be cognizant that participation in Bank schemes may pose risks to the poor. The nature of such risks, and the beneficiaries' understanding of and willingness and capacity to bear such risks, should be realistically assessed.

C. Strengthening Institutional Capacity to Implement Projects

49. Twenty-one out of 32 PPARs indicate that implementation performance has been adversely affected by a general weakness and lack of experience on the part of government institutions to implement and operate projects (Appendix 5, Table A5.2). PPARs noted that implementation of projects, especially in the agriculture and education sectors, suffered from delays in procurement, ineffective operation and maintenance of infrastructure, lack of interagency coordination, lack of approval authority and accountability, undefined responsibility, inadequate monitoring and evaluation as well as uncommitted service frequently associated with high rates of staff turnover and low morale. The 1998 CPRM reported that many of these implementation difficulties continue to affect the effectiveness of Bank's ongoing projects in Nepal.[26]

50. During project design and formulation, the Bank should adequately assess the institutional environment and management capability of the EA and implementing agencies. Care should be given in ascertaining the local government's priority and support, its capacity in terms of providing recurrent budgetary allocations and technical and managerial capability. Future projects should address institutional capacity and constraints as a major impediment to improved project implementation and effectiveness.

[26] OEO's Special Study of Bank Assistance for Capacity Building in Nepal dated 28 December 1995 reported that technical assistance for institutional strengthening has not been effective because of weak management by the EAs, lack of Government commitment, inadequate project formulation and budgetary constraints. Most of the TAs covered under the study were designed and prepared without adequate analysis of the prevailing policies and institutions in the concerned subsectors.

51. It appears that prospects for development in Nepal have deteriorated partly due to poor governance and corruption.[27] Nepal's institutions are weakened by their lack of efficiency, predictability, transparency and accountability. While PPARs emphasized the lack of capability and experience on the part of government institutions to implement projects, these evaluation studies were largely silent on issues of poor governance and corruption. As such, this Country Synthesis may not adequately reflect some of these current concerns. More noticeable in this review has been the Bank's weakness in project appraisal and implementation. Past findings and current observations clearly indicate, however, that both the Bank and the Government of Nepal bear joint responsibility for lack of project success.

IV. MAJOR LESSONS LEARNED

52. A review of PPARs and PCRs for projects approved between 1970 and 1990 points to the following lessons learned:

(i) Bank fact-finding and appraisal missions require more rigorous feasibility studies, more in-depth sector analysis, and more extensive fieldwork. More resources and focus should be given to processing missions. There should be improved supervision of TA outputs to ensure that feasibility studies are more realistic from the technical (including economic), social (including poverty, beneficiary and gender), institutional and environmental perspectives, and to enhance Government accountability for and ownership of TA projects.

(ii) Participation of local communities from the start is crucial for project success. Beneficiary participation and preferences should be sought during both design and implementation. If beneficiaries are involved both at the onset of the planning stage and during project implementation, they are more likely to claim ownership and commit to O&M, thereby contributing to project sustainability.

(iii) Project formulation must not only focus on the construction of facilities, but must also consider subsequent operation. Project design should institute appropriate O&M mechanisms and properly delineate responsibilities related to O&M. Political will to support sustained O&M through recurrent budget allocation should be carefully assessed and established at appraisal. Government commitment to implement agreed upon reforms and to allocate funds for O&M should be supported by operational guidelines and policies.

(iv) The institutional capability of the EA to supply qualified staff and services should be rigorously assessed. In multisectoral projects with a number of implementing agencies, the roles and responsibilities should be clarified at the start of the project. A central coordination unit at the working level may be necessary to promote good working relationships.[28]

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[27] Bank staff notes that weak governance has been a major issue affecting development administration in Nepal. Weak governance, in the form of political interference in the bureaucracy, lack of transparency and accountability and low staff morale, has contributed to limiting project effectiveness.

[28] The Bank and the Ministry of Finance agreed in 1998 that a precondition to loan negotiations is the appointment of the Project Manager and establishment of a Project office, including appointment of core staff.

(v) Project planning and design should consider the issues of good governance and anti-corruption to contribute to a more favorable project implementation environment.

(vi) Project design should consider alternative approaches, such as assistance for strengthening of sector institutions prior to the implementation of loan projects as well as simplification of scope, possibly with fewer agencies involved or smaller loans.

(vii) Relying on administrative sources of information gathered in Kathmandu rather than on information gathered from site visits, field investigations, and beneficiary interviews can lead to inaccurate assessment of local needs, inappropriate project siting, and inadequate technical design.

(viii) Project designs need effective benefit monitoring and evaluation systems and realistic performance indicators. As part of this monitoring system, project appraisals should make clear linkages between project inputs and expected benefits in the project framework. TA components should likewise have built-in mechanisms for monitoring consultant outputs during implementation and assessing performance.

(ix) To maximize project impact on poverty reduction, project design should include specific measures targeting the poor.

(x) Project design should emphasize the role of women in development by including components that specifically target women both as direct beneficiaries of projects and participants in their implementation.

(xi) The design of agricultural projects should ensure that essential services such as extension advice and inputs are well provided.

(xii) Project design should take cognizance of the country's special location constraints, including logistical issues and difficult access to mountainous areas, in developing procurement and construction schedules.

(xiii) Project design should incorporate stronger environmental monitoring programs, particularly for agriculture and large infrastructure projects, including the collection and/or use of environmental baseline and monitoring data. Focus of such environmental monitoring should be on assessing whether environmental impacts have reduced project effectiveness and sustainability.

(xiv) Given the logistical and technical challenges posed by Nepal, consultants with prior work exposure in Nepal, or in similarly remote, mountainous, and human resource-constrained areas, are more effective.

(xv) The Bank should more carefully evaluate the capacity of local contractors to finance, construct, and manage a project. Project design should consider special interventions for strengthening the capacity of local contractors.[29]

[29] NRM suggests that the Bank assist the Government in developing detailed procedural guidelines and evaluation system of contractors and consultants and a mechanism to maintain an updated list of good consultants and contractors.

(xvi) Bank review missions need to more closely supervise the quality of project implementation and construction work despite remoteness of the project areas. Project weaknesses identified during implementation require timely and detailed investigation. Bank review missions also need to focus more on institutional and social concerns; they should encourage frequent and rigorous interaction between EAs and beneficiaries.

(xvii) Private sector involvement should be encouraged especially in the marketing, distribution, and maintenance of project outputs, as long-term sustainability may depend on the ability of the private sector to use and support project components. Since Government-controlled pricing mechanisms have constrained private sector participation, there remains continuing need for reform of input-output pricing policies.

(xviii) The Bank's strategy should recognize that greater staff resources are needed to effectively formulate, supervise, and evaluate projects in Nepal. Adequate staff resources for site inspection outside Kathmandu are needed. This could be achieved by developing and strengthening the resources of the Resident Mission. If additional resources cannot be provided due to budgetary constraints, the Bank could consider concentrating its existing resources on improving the implementation of ongoing projects, perhaps deferring new projects until such time as implementation performance has significantly improved.

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