

**Document of
The World Bank**

FOR OFFICIAL USE ONLY

Report No.: 24021

PROJECT PERFORMANCE ASSESSMENT REPORT

LAOS PEOPLE'S DEMOCRATIC REPUBLIC

**UPLAND AGRICULTURE DEVELOPMENT PROJECT (CREDIT 2079)
PROVINCIAL GRID INTEGRATION PROJECT (CREDIT 2425)
FOREST MANAGEMENT AND CONSERVATION PROJECT (CREDIT 2586)**

April 16, 2002

*Sector and Thematic Evaluation Group
Operations Evaluation Department*

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

Currency Equivalents (annual averages)

Currency Unit = Kip

Currency Unit = Kip

US\$1.00 = Kip 550 (in July 1989)

= Kip 3,382 (in June 1998)

=Kip 9,000 (at OED assessment in October 2001)

Abbreviations and Acronyms

EdL	Electricité du Laos
ERR	Economic Rate of Return
ES	Evaluation Summary
GDP	Gross Domestic Product
ICR	Implementation Completion Report
OED	Operations Evaluation Department
PPAR	Project Performance Assessment Report
SAR	Staff Appraisal Report

Fiscal Year

Government: January 1 – December 31

Director-General, Operations Evaluation	:	Mr. Robert Picciotto
Director, Operations Evaluation Department	:	Mr. Gregory Ingram
Manager, Sector and Thematic Evaluation	:	Mr. Alain Barbu
Task Manager	:	Mr. John Heath

The World Bank
Washington, D.C. 20433
U.S.A.

Office of the Director-General
Operations Evaluation

April 16, 2002

MEMORANDUM TO THE EXECUTIVE DIRECTORS AND THE PRESIDENT

**SUBJECT: Project Performance Assessment Reports on Lao People's Democratic Republic
Upland Agriculture Development Project (Credit 2079)
Provincial Grid Integration Project (Credit 2425)
Forest Management and Conservation Project (Credit 2586)**

Attached are the Performance Assessment Reports prepared by the Operations Evaluation Department (OED) on the above three projects which included rural interventions in three sectors (respectively, agriculture, energy and forestry). The Upland Agriculture Development Project was approved on December 21, 1989 and closed on October 31, 1998, two-and-three-quarter years later than expected; a balance of US\$2.8 million was canceled. The Provincial Grid Integration Project was approved on October 6, 1992 and closed on June 30, 1999, one year later than planned; US\$1.1 million was canceled. The Forest Management and Conservation Project was approved on March 25, 1994 and closed on November 30, 2000, two months later than expected; US\$6.2 million was canceled.

This report examines the three projects in the light of rural development challenges facing Lao PDR, situating them in the broader context of IDA's 1990s program of assistance to the country. It concludes that, taking the program as a whole, IDA's sponsorship of policy reform was of limited effectiveness. In the case of the three projects assessed, the relevance to, and likely impact on, poverty reduction was also limited.

The objectives of the **Upland Agriculture Development Project** were to reduce rural poverty, expand export earnings, improve food security, control soil erosion and strengthen key agricultural institutions in upland farming areas. These objectives were to be achieved through: (a) intensification of upland crop production; (b) support to small-scale irrigation; (c) rehabilitation of feeder roads; and (d) provision of technical assistance.

While its objectives were relevant the project had too many components and was not well designed. Implementation was greatly delayed. The project's physical targets were only partly achieved and OED found that progress in diffusing new coffee varieties and cultivation techniques was less satisfactory than the ICR suggested. The economic rate of return for the coffee component was estimated as 12 percent by OED, compared to the ICR's estimate of 29 percent, the difference reflecting lower yields, lower world prices, and higher labor costs. The project's results were substantially less than expected for research, extension, and the rehabilitation of small-scale-irrigation and feeder roads.

<p>This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.</p>

In view of the limited realization of physical targets OED rates the project's outcome as unsatisfactory. Sustainability is rated unlikely given the unpromising price outlook for coffee, the weakness of research and extension, and the insufficient provision for irrigation cost recovery. Institutional development is rated negligible based on the failure to strengthen the capacity for research and extension and the uneven performance of water user associations. Bank and borrower performance are both rated unsatisfactory, reflecting the poor project design and the slow progress on implementation.

The main objectives of the **Provincial Grid Integration Project** were to extend electricity supply to more consumers in southern and central provinces, and to improve the system efficiency of the utility, Electricite du Laos (EdL). This was to be achieved by extending the 22kV distribution networks and implementing an action program for EdL to monitor and reduce system losses, increase collections and improve billing practices.

The project would have been more relevant if it had made improving EdL's efficiency the first priority. The primary focus was grid extension (which absorbed 69 percent of project costs) and, judged on these terms, the project was successful. The number of villages electrified (569) was double the appraisal target and the number of households connected was almost three times higher than expected. Grid extension was carried out cost efficiently with significant financial contribution by beneficiary households. The economic rate of return varied by province, from 18 to 44 percent, generally exceeding appraisal estimates. On the other hand, the financial covenants bearing on EdL's efficiency were only partially complied with.

Given that the project amply exceeded the physical targets set at appraisal, OED rates outcome as satisfactory. Sustainability is rated unlikely because EdL's finances have continued to deteriorate, compromising maintenance and repair of the infrastructure built by the project. Institutional development is rated modest in view of the limited progress made in increasing the utility's system-wide efficiency. Bank and borrower performance are rated satisfactory because both contributed effectively to meeting the primary objective of grid extension.

The objective of the **Forest Management and Conservation Project** was to assist with the introduction of more sustainable natural resource management. This was to be achieved by strengthening the institutional and regulatory framework, and providing support to village forestry schemes and the National Biodiversity Conservation Areas. The relevance of the project diminished when, shortly after the loan became effective, the institutional and regulatory component was dropped.

Village forestry development was successfully piloted, with 33 Village Forest Associations set up in the two provinces targeted. Villagers were intensively trained to help plan and implement management plans for the production forest in their vicinity, receiving a share of the revenue from the timber harvested. The one other project component—support to the National Biodiversity Conservation Areas—produced a series of plans but little action. Assessment of both components was hampered by the absence of appraisal targets and discrepant data on project outputs.

OED rates outcome as unsatisfactory owing to the abandonment of the policy reform objective (e.g. with respect to log pricing), and the project's limited achievements. Weak government commitment to the village forestry principle and the high cost that would probably be entailed by scaling up the pilot point to unlikely sustainability. Institutional development is rated

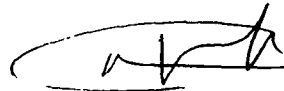
unsatisfactory because the key policy issues were neglected and a national training program for village forestry was not established. Bank and borrower performance is rated unsatisfactory, because of the project's unsatisfactory quality at entry and limited government commitment.

Experience with these projects confirms three important OED lessons of particular relevance to future Bank assistance to Laos. *First, in countries where government's capacity is weak, the lack of donor coordination may seriously undermine development progress.* In Lao PDR, donors have tended to set up enclave operations, the net effect of which is a failure to build up sustainable national programs. For example, various donors have sponsored operations with research and extension components but there has been no concerted effort to build a national service capable of serving the long-term needs of the agriculture and forestry sectors.

Second, there is a compelling need for the Bank's project work to be solidly grounded in prior analytic work. Unlike many other donors the Bank has the means to do this well. This comparative advantage makes the Bank a natural leader in donor coordination (a role that it has not played in Lao PDR) and the dialogue with government on policy. The Bank's 2001 review of production forestry (co-sponsored with Sweden and Finland) illustrates this potential for sound analytic work, providing an excellent platform for dialogue (even if there has not yet been a meeting of minds with government). In contrast, the Bank's energy group appears to have skimped on sector work, and this may have reduced its effectiveness as a reform advocate.

Third, the leverage to be gained by attaching policy conditions to investment loans is often less than expected. Both the Provincial Grid Integration Project and the Forest Management and Conservation Project had policy strings attached; but there was no policy reform, substantially reducing the impact of the project's achievements. The completion report for the second of these projects also notes that policy reform cannot effectively be championed by operations geared primarily to small, regional pilots. In countries such as Lao PDR where the government is reluctant to adjust policy, the Bank may have more leverage by declining to lend than by providing investment loans with policy strings attached. This finding is not peculiar to Laos.

Attachment



OED Mission: Enhancing development effectiveness through excellence and independence in evaluation.

About this Report

The Operations Evaluation Department assesses the programs and activities of the World Bank for two purposes: first, to ensure the integrity of the Bank's self-evaluation process and to verify that the Bank's work is producing the expected results, and second, to help develop improved directions, policies, and procedures through the dissemination of lessons drawn from experience. As part of this work, OED annually assesses about 25 percent of the Bank's lending operations. Assessments are conducted one to seven years after a project has closed. In selecting operations for assessment, preference is given to those that are innovative, large, or complex; those that are relevant to upcoming country evaluations; those for which Executive Directors or Bank management have requested assessments; and those that are likely to generate important lessons. The projects, topics, and analytical approaches selected for assessment support larger evaluation studies.

A Project Performance Assessment Report (PPAR) is based on a review of the Implementation Completion Report (a self-evaluation by the responsible Bank department) and fieldwork conducted by OED. To prepare PPARs, OED staff examine project files and other documents, interview operational staff, and in most cases visit the borrowing country for onsite discussions with project staff and beneficiaries. The PPAR thereby seeks to validate and augment the information provided in the ICR, as well as examine issues of special interest to broader OED studies.

Each PPAR is subject to a peer review process and OED management approval. Once cleared internally, the PPAR is reviewed by the responsible Bank department and amended as necessary. The completed PPAR is then sent to the borrower for review; the borrowers' comments are incorporated into the document that is sent to the Bank's Board. When an assessment report is released to the Board, it is also widely distributed within the Bank and to concerned authorities in member countries.

About the OED Rating System

The time-tested evaluation methods used by OED are suited to the broad range of the World Bank's work. The methods offer both rigor and a necessary level of flexibility to adapt to lending instrument, project design, or sectoral approach. OED evaluators all apply the same basic method to arrive at their project ratings. Following is the definition and rating scale used for each evaluation criterion (complete definitions and descriptions of factors considered are available on the OED website: <http://wbi1023.worldbank.org/oed/oeddoclib.nsf/232d43ae09e87ac985256966007cc257/acaeb95358e99e578525698c005190da?OpenDocument>).

Relevance of Objectives: The extent to which the project's objectives are consistent with the country's current development priorities and with current Bank country and sectoral assistance strategies and corporate goals (expressed in Poverty Reduction Strategy Papers, Country Assistance Strategies, Sector Strategy Papers, Operational Policies). *Possible ratings:* High, Substantial, Modest, Negligible.

Efficacy: The extent to which the project's objectives were achieved, or expected to be achieved, taking into account their relative importance. *Possible ratings:* High, Substantial, Modest, Negligible.

Efficiency: The extent to which the project achieved, or is expected to achieve, a return higher than the opportunity cost of capital and benefits at least cost compared to alternatives. *Possible ratings:* High, Substantial, Modest, Negligible.

Sustainability: The resilience to risk of net benefits flows over time. *Possible ratings:* Highly Likely, Likely, Unlikely, Highly Unlikely, Not Evaluable.

Institutional Development Impact: The extent to which a project improves the ability of a country or region to make more efficient, equitable and sustainable use of its human, financial, and natural resources through: (a) better definition, stability, transparency, enforceability, and predictability of institutional arrangements and/or (b) better alignment of the mission and capacity of an organization with its mandate, which derives from these institutional arrangements. Institutional Development Impact includes both intended and unintended effects of a project. *Possible ratings:* High, Substantial, Modest, Negligible.

Outcome: The extent to which the project's major relevant objectives were achieved, or are expected to be achieved, efficiently. *Possible ratings:* Highly Satisfactory, Satisfactory, Moderately Satisfactory, Moderately Unsatisfactory, Unsatisfactory, Highly Unsatisfactory.

Bank Performance: The extent to which services provided by the Bank ensured quality at entry and supported implementation through appropriate supervision (including ensuring adequate transition arrangements for regular operation of the project). *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

Borrower Performance: The extent to which the borrower assumed ownership and responsibility to ensure quality of preparation and implementation, and complied with covenants and agreements, towards the achievement of development objectives and sustainability. *Possible ratings:* Highly Satisfactory, Satisfactory, Unsatisfactory, Highly Unsatisfactory.

Contents

Principal Ratings.....	v
Key Staff Responsible	vi
Preface.....	vii
1. Overview.....	1
<i>World Bank Support to Rural Areas</i>	<i>2</i>
<i>Lessons.....</i>	<i>5</i>
2. Upland Agriculture Development Project.....	6
<i>Relevance: Modest.....</i>	<i>6</i>
<i>Efficacy: Modest</i>	<i>7</i>
<i>Efficiency: Modest</i>	<i>10</i>
<i>Outcome: Unsatisfactory.....</i>	<i>10</i>
<i>Sustainability: Unlikely.....</i>	<i>11</i>
<i>Institutional Development: Negligible.....</i>	<i>11</i>
<i>Bank Performance: Unsatisfactory.....</i>	<i>11</i>
<i>Borrower Performance: Unsatisfactory</i>	<i>11</i>
3. Provincial Grid Integration Project.....	12
<i>Relevance: Modest.....</i>	<i>12</i>
<i>Efficacy: Substantial.....</i>	<i>13</i>
<i>Efficiency: Substantial.....</i>	<i>15</i>
<i>Outcome: Satisfactory.....</i>	<i>18</i>
<i>Sustainability: Unlikely.....</i>	<i>18</i>
<i>Institutional Development: Modest.....</i>	<i>18</i>
<i>Bank Performance: Satisfactory.....</i>	<i>18</i>
<i>Borrower Performance: Satisfactory.....</i>	<i>19</i>
4. Forest Management and Conservation Project	19
<i>Which Objectives Should Be Rated?</i>	<i>19</i>
<i>Relevance: Substantial.....</i>	<i>20</i>
<i>Efficacy: Modest</i>	<i>21</i>
<i>Efficiency: Modest</i>	<i>24</i>
<i>Outcome: Unsatisfactory.....</i>	<i>24</i>

This report was prepared by John Heath, who assessed the project in October 2001. The report was edited by William Hurlbut, and Marcia Bailey provided administrative support.

<i>Sustainability: Unlikely</i>	24
<i>Institutional Development: Negligible</i>	25
<i>Bank Performance: Unsatisfactory</i>	25
<i>Borrower Performance: Unsatisfactory</i>	26
Annex A. Supplementary Tables	27
Annex B. Basic Data	29

Boxes

Box 1. What is the Likely Impact of Rural Electrification on Poverty Reduction?.....	5
Box 2. Objectives, Components, and Scope: Upland Agriculture Development Project	6
Box 3. Project Objectives and Components: Provincial Grid Integration	12
Box 4. Objectives and Components: Forest Management and Conservation Project.....	19

Tables

Table 1. Poverty Incidence	1
Table 2. Bank Work Particularly Relevant to Rural Areas of Lao PDR, FY1990-FY2002	2
Table 3. Staffing, Hin Heup Station, 1998 and 2001	9
Table 4. Coffee Component: Assumptions Made by Economic Analysis.....	10
Table 5. Cost to the Bank of Preparation and Supervision	11
Table 6. Performance Indicators	14
Table 7. Scale of EDL's Losses on Domestic Sales of Electricity, 2000	15
Table 8. Savings per Rural Household from Grid Electrification.....	16
Table 9. Cost of Distribution Lines.....	16
Table 10. Project Cost.....	16
Table 11. Kilometers of Energized Line Per Connection	17
Table 12. Power System Losses.....	17
Table 13. Collection Rates	18
Table 14. Cost to the Bank of Preparation and Supervision	18
Table 15. Scope of Village Forestry	22
Table 16. Bank Expenditures Compared to Regional Mean.....	25

Figures

Figure 1. Debt Service Coverage	13
Figure 2. Self-financing Ratio.....	13

Principal Ratings

Upland Agriculture Development Project (Credit 2079-LA)

	<i>ICR*</i>	<i>ES*</i>	<i>PPAR</i>
Outcome	Satisfactory	Satisfactory	Unsatisfactory
Sustainability	Likely	Uncertain	Unlikely
Institutional development impact	Substantial	Modest	Negligible
Borrower performance	Satisfactory	Satisfactory	Unsatisfactory
Bank performance	Satisfactory	Unsatisfactory	Unsatisfactory

Provincial Grid Integration Project (Credit 2425-LA)

	<i>ICR*</i>	<i>ES*</i>	<i>PPAR</i>
Outcome	Satisfactory	Satisfactory	Satisfactory
Sustainability	Uncertain	Uncertain	Unlikely
Institutional development impact	Substantial	Substantial	Modest
Borrower performance	Satisfactory	Satisfactory	Satisfactory
Bank performance	Satisfactory	Satisfactory	Satisfactory

Forest Management and Conservation Project (Credit 2586-LA)

	<i>ICR*</i>	<i>ES*</i>	<i>PPAR</i>
Outcome	Unsatisfactory	Unsatisfactory	Unsatisfactory
Sustainability	Unlikely	Unlikely	Unlikely
Institutional development impact	Negligible	Negligible	Negligible
Borrower performance	Unsatisfactory	Unsatisfactory	Unsatisfactory
Bank performance	Satisfactory	Unsatisfactory	Unsatisfactory

* The Implementation Completion Report (ICR) is a self-evaluation by the responsible operational division of the Bank. The Evaluation Summary (ES) is an intermediate OED product that seeks to independently verify the findings of the ICR.

Key Staff Responsible

Upland Agriculture Development Project (Credit 2079-LA)

	<i>Appraisal</i>	<i>Completion</i>
Country Director	Callisto E. Madavo	Ngozi Okonjo-Iweala
Sector Manager	Donna Dowsett-Coirolo	Geoffrey B. Fox
Task Team Leader	Yves Wong	Supee Teravaninthorn

Provincial Grid Integration Project (Credit 2425-LA)

	<i>Appraisal</i>	<i>Completion</i>
Country Director	Callisto E. Madavo	Ngozi Okonjo-Iweala
Sector Manager	Vineet Nayyar	Yoshihiko Sumi
Task Team Leader	Jamil Sopher	Enrique Crousillat

Forest Management and Conservation Project (Credit 2586-LA)

	<i>Appraisal</i>	<i>Completion</i>
Country Director	Callisto Madavo	Ian Porter
Sector Manager	Pamela Cox	Mark D. Wilson
Task Team Leader	Yves Wong	William B. Magrath

Preface

This is a Performance Assessment Report (PPAR) of three projects in Lao People's Democratic Republic:

- The Upland Agriculture Development Project, for which Credit No. 2079-LA in the amount of US\$20.2 million equivalent was approved on December 21, 1989. The credit was closed on June 30, 1998, rather than on the expected closing date of December 31, 1995. The final disbursement took place on October 31, 1998, at which time a balance of US\$2.8 million was canceled.
- The Provincial Grid Integration Project, for which Credit No. 2425-LA in the amount of US\$36.0 million equivalent was approved on October 6, 1992. The closing date was June 30, 1999, one year later than originally planned. The last disbursement took place on November 19, 1999; the balance of US\$1.1 million was canceled.
- The Forest Management and Conservation Project, for which Credit No. 2586-LA in the amount of US\$8.7 million equivalent was approved on March 25, 1994. The closing date was November 30, 2000, two months later than expected. The date of the last disbursement is not recorded in the implementation completion report. A balance of US\$6.2 million equivalent was canceled.

The PPAR presents the findings of a mission by the Operations Evaluation Department that visited Lao PDR in October 2001. The mission was conducted by Mr. John R. Heath. The findings draw on interviews with villagers, project staff, officials of the Government of Lao PDR and Bank staff. The collaboration of these persons is gratefully acknowledged. In addition, the PPAR draws on staff appraisal reports, implementation completion reports and other background data.

Following customary procedures, copies of the draft PPAR have been sent to the relevant government officials and agencies for review and comment. No comments were received.

1. Overview

1.1 The wealth of Lao is very much of rural origin, deriving from its forest and water resources, and land of farming potential. Despite heavy deforestation, 45 percent of the country is covered by natural forest. About one-half of GDP derives from agriculture. Poverty is overwhelmingly a rural phenomenon: 90 percent of the poor live in rural areas. The incidence of poverty is gradually declining but at a faster rate in urban than in rural areas (Table 1).

Table 1. Poverty Incidence (percentage of poor)

<i>Regions</i>	<i>Urban Areas</i>			<i>Rural Areas</i>		
	<i>1992-93</i>	<i>1997-98</i>	<i>Growth rate</i>	<i>1992-93</i>	<i>1997-98</i>	<i>Growth rate</i>
Vientiane Municipality	22.46	16.70	-5.9	30.14	4.47	-38.2
Northern Region	48.93	43.27	-2.5	60.40	53.53	-2.4
Central Region	37.42	27.65	-6.1	39.89	35.89	-2.1
Southern Region	27.64	35.84	5.2	49.62	38.66	-5.0
Lao PDR	33.14	26.86	-4.2	48.66	40.97	-3.4

Source: World Bank, Interim Poverty Reduction Strategy Paper, April 2001.

1.2 The country is still only lightly developed. There are only 16 persons per square kilometer in rural areas. Only 6 percent of the total land area is used for pasture or crops. Roughly 80 percent of the cultivated area is devoted to rice, much of it consumed by the farmers that produce it. The main export crop is coffee, accounting for 14 percent of all export earnings; prospects for expansion of this crop are much constrained by poor world prices and heavy competition from Vietnam (which is also primarily a robusta producer). Crop yields are low. Significantly, yields for irrigated land are barely higher than the average for all cropland. This calls into question the wisdom of the government's decision to invest heavily in irrigation (the largest item in the agriculture budget), while neglecting the development of a national research and extension service.

1.3 The incentive for farmers to produce a marketable surplus of crops and to diversify out of rice is reduced by the lack of farm to market roads and the land-locked nature of the country, factors which push down the farm-gate price well below levels in neighboring countries. Of the 23,200 km of roads, fewer than half are surfaced. Around 40 percent of the population lives more than 6 km from a main road.

1.4 These considerations suggest that a growth and poverty focused rural development strategy should give primary emphasis to boosting agricultural productivity and improving access to markets. With a total population of only 5 million, growth prospects will continue to hinge overwhelmingly on export markets. Integration with world markets is still fairly modest, with exports accounting for only 22 percent of GDP.

1.5 Exports of wood and wood products are the largest single trade item, accounting for 34 percent by value of all merchandise exported. The official figures for forestry exports are understated failing to reflect revenues generated from the covert export of logs to Vietnam and Thailand. The government has issued numerous regulations limiting the amount of living timber that can be felled each year and banning the export of unprocessed logs, but these have proved difficult to enforce. A primary beneficiary of forest rents is the army whose BPKP Import-Export company counts logging as one of the more important of its diverse interests.

1.6 Hydroelectric power—exported primarily to Thailand—accounts for 18 percent of goods exports.¹ Receipts from exporting hydropower are an essential source of cross-subsidy for the electricity utility, which is losing money on its domestic business, an operation that, serves only 20 percent of the population (primarily better-off urban households and commercial enterprises). This is a singularly regressive way of distributing natural resource rents. The Nam Theun 2 hydropower scheme—in preparation for the past ten years, with assistance from the Bank since 1995—is regarded as the country’s best hope for substantially boosting export revenues; and, in principle, some of the ample dividends from this development will be used to combat poverty. Nam Theun 2 is conceived of as an enclave operation and will export 95 percent of its output. The export prospects are substantial. But Thai demand has fallen since the East Asia slump: the price at which Lao PDR exports to Thailand fell from 3.6 to 3.1 US cents/kWh between 1992 and 2000. Export demand cannot be taken too much for granted. Thailand has a burgeoning power industry of its own and access to alternative cross-border sources (e.g. Myanmar).

1.7 In these circumstances, poverty elimination will hinge on some redistribution of the rents from natural resources—mainly forest products and hydropower—coupled with successful efforts to boost agricultural growth. But the scope for redressing poverty and the uneven distribution of natural resource rents is limited by the politics of Lao PDR. Since 1975 Laos has been controlled by a one-party regime that has nothing to gain from promoting economic or political competition, or giving the poor more voice. Since 1986 the government has moved from a centrally planned to a market economy. But it has adopted a gradualist approach, eschewing radical policy reform. As transition economies go, Lao PDR is a poor performer: a “low outlier” on the Heritage Foundation’s indices of trade policy and government regulation.

1.8 The government has willingly taken donor money for investment projects but has been less willing to engage with donors in a frank and open discussion on policy—whether on agriculture, natural resource management or energy. This political context substantially reduces the scope for effective development assistance. In principle, the potential for donor leverage is substantial. In 1998, the inflow of official development assistance (US\$354.5 million) was equivalent to about 70 percent of government expenditures.² However, donors are poorly coordinated—and the Bank is not playing a lead coordinating role.

World Bank Support to Rural Areas

1.9 From 1991 to 2002, 25 operations were approved for a total commitment of US\$422 million; five of these were in agriculture, accounting for 6 percent of commitments. Projects in the environment, transport, health, social protection and energy sectors also had a major focus on rural and periurban areas (Table 2).

1.10 Operations in Lao PDR face major problems: 43 percent of the ten projects now underway are designated at risk, compared to a Bank-wide average of 12 percent.

Table 2. Bank Work Particularly Relevant to Rural Areas of Lao PDR, FY1990-FY2002

(a) Overall Strategy		
FY96	Country Assistance Strategy	15284
FY99	Country Assistance Strategy	19098
FY01	Interim Poverty Reduction Strategy Paper	22055

1. 1998 figures (latest available) as reported in the EIU Country Profile 2001.

2. Interim Poverty Reduction Strategy Paper, (Report No. 22055), April 6, 2001, Table 1.

(b) Analysis			
FY90	First, Second, and Third Agricultural Rehabilitation and Development Projects	OED Precis	8884
FY94	Environmental Overview		11978
FY95	Agricultural Sector Memorandum		13675
FY96	Social Development Assessment		13992
FY97	Rural Infrastructure Development		16047
FY97	Public Expenditure Review		16094
FY99	Institutional Development for Off-Grid Electrification		ESM215
FY99	Natural Resources Management: A Strategic Framework for East Asia		21293
FY00	Promoting Sustainable Rural Development	FAO/CP Review (5 vols.)	99/068 CP-LAO
FY01	Poverty in Lao PDR, 1993-1998	DEC, March 2001 draft	
FY01	Production Forestry Policy	World Bank/SIDA/Government of Finland (2 vols.)	
FY02	Public Expenditure Review	Agriculture and Rural Development chapter, September 2001 draft	
(c) Projects			
FY90	Uplands Agricultural Development		P004195
FY93	Provincial Grid Integration		P004197
FY94	Forest Management and Conservation		P004196
FY94	Luang Namtha	Upgrade roads and drinking water supply in poor rural province	P004207
FY95	Health System Reform	Inc. rural malaria eradication	P004200
FY96	Land Titling	Foster development of efficient land markets.	P004208
FY98	Southern Provinces Rural Electrification	Expand rural electricity services in 7 central and southern provinces.	P044973
FY99	Provincial Infrastructure Development	Upgrade infrastructure (rural roads and drinking water) in remote northern provinces of Oudomxay and Phongsaly.	P042237
FY99	District Upland Development	Intensify upland agriculture in the central province of Khammouane.	P059305
FY01	Agricultural Development	Irrigation and Drainage	P065973

1.11 Between 1977 (when the Bank first began work in Lao PDR) and 1990, rural projects suffered from the following defects³:

- Too many components, typically involving a mix of agriculture and infrastructure elements;
- Too many provinces covered in a single operation;
- Faulty technical design (e.g. research stations sited on inappropriate soils)
- No consultation with beneficiaries during preparation;
- Insufficient resources committed to preparation and appraisal;
- Lack of provision for monitoring and evaluation;
- Inadequate technical assistance (aggravated by lack of consultants able to speak Lao);
- Absence of coordination with other donors (e.g. duplication of efforts)

3. First, Second and Third Agricultural Rehabilitation and Development projects (respectively C760, C924 and C1021), evaluated by OED in 1990 (Report No. 8884, June 29, 1990).

1.12 The problems were acknowledged, but not effectively tackled, by the Upland Agriculture Development Project (*assessed in this report*).

1.13 Subsequent projects developed by the Bank's infrastructure group improved on these earlier efforts: Luang Namtha and Provincial Infrastructure were simpler (limited to rural infrastructure and one or two provinces), and took greater steps to involve beneficiaries and provincial governments. They have a good implementation record.

1.14 Projects developed by the Bank's agriculture and natural resource management group were less effective. A comprehensive sector review (1995) presented a sound analysis of issues but its investment proposals did not tackle the major problems: weak agricultural services, a pattern of public spending biased toward irrigation, and policy distortions.

1.15 Because a land titling project was already under preparation, the 1995 sector review inevitably included land titling on its list of investment proposals. Yet the case made for this intervention is not entirely compelling. Tenure insecurity was then, and remains now, a small problem compared to low farm productivity. On the other hand, the project was eminently *doable*—it was able to replicate a successful set of projects in Thailand; and the government had shown its commitment by taking steps to increase individual land rights.⁴ But the Land Titling Project focuses on the fringes of the major towns—which makes sense because this is where the land market is most developed. By this very token, however, the project fails to tackle rural poverty head on. The Bank's attempt to clarify tenure over forest lands and forest products was more valid. The Forest Management and Conservation Project (*assessed in this report*) was highly relevant. But it was not well designed, containing too many diffuse components. On the other hand, the sector work that was a byproduct of this project (in collaboration with Sweden and Finland) was of very high quality.

1.16 Electrification projects have not addressed rural poverty. Arguably, it was correct for them not to pretend to do so: an OED study has shown that the impact of electrification in reducing rural poverty is generally likely to be low⁵; the same appears to be true for Laos (Box 1). In any event, the poverty reduction objective should be conditional upon the existence of measures to ensure the economic viability of extending the grid into rural areas. Without this viability the sustainability of the grid will be called into question, thus removing any possibility of a long-term contribution to poverty eradication. The Provincial Grid Integration project (*also assessed in this report*) succeeded in terms of its primary objective of efficiently extending the grid; but failed to address system-wide inefficiencies, the scale of which has greatly increased since that project closed. Unlike the agriculture and infrastructure groups of the Bank, the energy unit performed no comprehensive sector work. The analysis carried out under the aegis of project preparation has focused on the financial weaknesses of the utility and has not grappled with more fundamental economic issues: for example, there is still no reliable estimate of the long-run marginal cost of electricity supply.

1.17 Poor coordination with other donors has been a continuing weakness of the Bank's support to Lao PDR, partly reflecting the lack of a fully equipped mission in Vientiane. This weakness may also have contributed to the limited progress made on policy reform.

4. Measures to increase tenure security were among the first to be adopted by the government following the switch from plan to market. In 1988, a resolution "gave individual farmers long-term guarantees to the use, transfer, and inheritance of land, and permitted them to hold land titles although ownership remained with the state. The resolution was given more teeth by the 1991 constitution and made into law in December 1992 (Decree No. 99/92 Agriculture Sector Memorandum, March 23, 1995 (Report No. 13675), p. 6.

5. OED, Rural Electrification in Asia: A Review of Bank Experience, June 30, 1994 (Report No. 13291).

Box 1. What is the Likely Impact of Rural Electrification on Poverty Reduction?

In Laos, at least, the impact has probably been slight. Data from national household expenditure surveys conducted in 1992 and 1997 (Table A5) show that rural households with access to electricity were better off than those without—whether “better off” is defined in terms of mean monthly consumption, or the proportion of total consumption accounted for by the consumption of household output (this proportion tending to be higher for poorer—more subsistence-oriented—households). According to both measures, and for each year, there is statistically significant difference in consumption between households with and without electricity: the former are better off. This could mean two things: either better-off households were more likely to be connected to the grid; or, as a consequence of grid connection, households became significantly better off. The second of these possibilities is not borne out by the data. Between 1992 and 1997, the monthly consumption of rural households with electricity rose from US\$132 to US\$144. For households without electricity monthly consumption was the same in both years (US\$85). However, although the households with electricity became slightly better off compared to non-electrified households, the difference in the growth of consumption is not statistically significant.

1.18 The three projects assessed here each suggest, in certain respects, a need for stricter managerial oversight of the Laos program. More effective oversight would have ensured greater attention to the policy issues, stronger quality at entry and possibly (in the case of the Forest Conservation Project) thinking twice before proceeding with a follow-up operation—given the weak evidence for government commitment.

Lessons

1.19 This assessment confirms three important OED lessons. *First, in countries where government's capacity is weak, the lack of donor coordination may seriously undermine development progress.* In Lao PDR, donors have tended to set up enclave operations, the net effect of which is a failure to build up sustainable national programs. For example, various donors have sponsored operations with research and extension components but there has been no concerted effort to build a national service capable of serving the long-term needs of the agriculture and forestry sectors.

1.20 *Second, there is a compelling need for the Bank's project work to be solidly grounded in prior analytic work.* Unlike many other donors the Bank has the means to do this well. This comparative advantage makes the Bank a natural leader in donor coordination (a role that it has not played in Lao PDR) and the dialogue with government on policy. The Bank's 2001 review of production forestry (co-sponsored with Sweden and Finland) illustrates this potential for sound analytic work, providing an excellent platform for dialogue (even if there has not yet been a meeting of minds with government).

1.21 *Third, the leverage to be gained by attaching policy conditions to investment loans is often less than expected.* Both the Provincial Grid Integration Project and the Forest Management and Conservation Project had policy strings attached; but there was no policy reform, substantially reducing the impact of the project's achievements. The completion report for the second of these projects also notes that policy reform cannot effectively be championed by operations geared primarily to small, regional pilots. In countries such as Lao PDR where the government is reluctant to adjust policy, the Bank may have more leverage by declining to lend than by providing investment loans with policy strings attached.⁶ This finding is not peculiar to Laos.

6. The Region (Energy group) responds: “We disagree with this statement. Although it is correct to say that the government is reluctant to policy adjustments—nevertheless it moves slowly—in countries like Laos, which have been

2. Upland Agriculture Development Project

Relevance: Modest

2.1 The project's development objectives (Box 2) remain relevant today, but the strategy for achieving them (reflected in the project components) is only moderately so. The ICR notes that the project "was too ambitious considering the capacity of the implementing agencies. The physical targets were unrealistic, the geographical coverage was too wide, and there were too many diverse components."⁷

Box 2. Objectives, Components, and Scope: Upland Agriculture Development Project (Credit 2079)

Objectives

"The project aims at reducing rural poverty, expanding export earnings, and improving food security, controlling soil erosion and strengthening key agricultural institutions in upland farming areas."

Components

"(a) Intensification of upland crop production, mainly of coffee, soybeans and other cash crops, and valley floor irrigated production of rice and other food crops through the provision of equipment, inputs and support services, and the development and transfer of improved and environmentally safe technologies;
(b) Rehabilitation of existing small-scale gravity irrigation schemes and establishment of pilot irrigation operation and maintenance arrangements based on adequate cost recovery from beneficiaries;
(c) Feeder road rehabilitation and maintenance, and improvement of village water supply; and
(d) Technical assistance and training."

Scope

"The five-year project would cover Champassak, Saravane and Sekong Provinces on the Bolovens Plateau in the south, and Vientiane Municipality and Province in the north. Project activities would extend mainly over the higher elevations of the project areas (from 200 to over 1,200 m), concentrating on upland cropping systems, with the exception of irrigation rehabilitation in the valley floors in Vientiane Province."

Source: Staff Appraisal Report, p. 8.

2.2 This suggests that the project did not incorporate lessons learned from the three previous agricultural rehabilitation and development projects that closed in 1986, 1987 and 1988, even though it was acknowledged at appraisal that:

"These earlier projects were constrained by a weak institutional framework, unclear or inappropriate sectoral priorities, lack of production incentives and poor project preparation...project impact has been mixed since policies relating to wages, pricing, marketing, subsidies and other incentives, research and extension...were slow to develop."⁸

historically isolated both in a geographical and ideological manner, the proposed strategy would simply perpetuate its isolation and render no results. The advantage of keeping ongoing lending activities is that they provide the opportunity of a continuous dialogue and, through it, gradually move towards a reform".

7. Implementation completion report (No. 18641), p. ii.

8. Staff appraisal report (No. 8003), p. 6.

2.3 The coffee component was not consistent with Bank strategy at that time, although, by today's standards, the point is moot. In FY1990, when the project was approved, the Bank's policy on beverage crops was still in force. In 1982 the Bank introduced lending restrictions for new plantations of coffee, based on the assumption that demand was inelastic. Following a 1993 OED report, the policy was repealed.⁹ Whatever the merits of the beverage policy, the failure to adhere to it indicates weak managerial oversight.

Efficacy: Modest¹⁰

2.4 The project's targets were scaled back in 1995 but development objectives remained the same and there was no formal restructuring. The targets were revised because implementation had been slow—owing to frequent changes in agency responsibilities and staffing, and late release of counterpart funds. Because restructuring was not driven by factors beyond the control of bank or borrower, efficacy is rated against the appraisal targets, in accordance with the current ICR guidelines.¹¹

2.5 The ICR states that the project exceeded appraisal targets for coffee development, and partially met the targets for other components. OED's findings in the field do not bear out the ICR's verdict that satisfactory progress was made in diffusing new coffee varieties and cultivation techniques.

(a) Coffee development in the south

2.6 According to the ICR, the area under the project reached 15,345 hectares, with 5,700 hectares brought under improved husbandry, 622 hectares destumped and infilled, and 9,067 hectares newly planted. The improved, destumped and newly planted areas were respectively 181 percent, 18 percent and 143 percent of the appraisal targets. The shortfall in destumping is attributed to farmers' reluctance to face the necessary short-term loss in income.

2.7 OED failed to substantiate the ICR's claim that the project had a substantial impact on coffee production in the southern provinces that were targeted. The mission visited the Ban Itou station and some of the surrounding villages. At Ban Itou, the facilities are all in good condition but are hardly used. The meeting rooms, canteen and dormitories were intended to accommodate farmer training courses but recently the government has not provided funds for this. Roads and a bridge built at the station site with project funds have not been maintained and are badly eroded.

2.8 The station has 19 research workers, whose salaries are paid for by a French project that ended in November 2001. According to the resident French technical assistance mission, there is

9. Agriculture and Natural Resources Department, The Bank Group's Policy on Beverage Crops: A Reassessment (Report No. 15424), March 1996.

10. The ICR team argues that, in assessing the project's achievements, the following considerations need to be taken into account:

- the impact of the [post-1997] economic crisis on the already weak governmental and institutional structures, and the severe budget constraints, which adversely impacted incentives at the project level, and dramatically reduced resource availability in real terms;
- the deterioration in fertilizer, chemicals and high-yielding seed availability and prices, which would adversely impact irrigated crop yields; and
- the effects of the much lower coffee prices and government budget cuts, on farmer incentives to expand production."

11. Chapter II, Section D, Changing Objectives, OPCS, July 1999.

very little coordination between the program of the station and that of extension workers at the district and provincial level. None of the extension workers in the locality are coffee specialists.¹²

2.9 Coffee development, according to the French, has been constrained by the recent worldwide price collapse, the acidity of the soil in the targeted area, the failure to focus on high-grade arabicas geared to niche markets, and the high cost of labor—at harvest time farmers need to supplement family workers with hired laborers. The French experts also maintain that the Ban Itou station was not well located: it is on the fringe of the coffee growing area, its soil is too acid, and the nursery was badly sited.¹³

2.10 The ICR reports that the Ban Itou station “now produces about one million seedlings per year, as planned at appraisal” (p. 3). But the station manager told OED that production of seedlings was suspended in 1992 (i.e. only two years into the project) because it proved to be too expensive: nursery labor costs were too high, and too many seedlings were damaged in transport.¹⁴

2.11 The ICR also suggests that the coffee component was in some sense targeted: “a large number of farmers on the Bolovene (sic) Plateau are from minority tribes, who are among the poorest of the poor” (p.6). The French experts interviewed by the mission said that, on the contrary, coffee farmers were relatively well off, certainly compared to farmers at lower altitudes (from whose ranks seasonal laborers are recruited). The Bolovens is an exception to the Laos rule that the poorest live on the upland summits and sell their labor to better off farmers (typically those with irrigation) on the valley floors.¹⁵

12. The ICR team responds: “In response to this comment, the team would like to point out that the project’s design included the provision of training for existing extension workers, in coffee cultivation (which was delivered during implementation, mostly by French technical assistants). According to a project activity report prepared by the French TAs, and available with the team, 238 extension workers were trained in coffee related topics, such as seedling care, tree maintenance, improved coffee quality, etc., during 1995 and 1996. It is worth highlighting that the project was not designed to turn the existing extension workers into “coffee specialists,” but to provide specific training to existing personnel. The ICR mission, which included Bank staff with local language skills, interviewed the extension workers in their own language, and was able to directly confirm that the extension agents had received training in coffee cultivation; and that they had been able to influence farmer willingness to purchase seedlings from Ban Ito under the project. It is quite possible that training may have ceased after the project due to budget limitations.”

13. There appears to have been little incorporation of lessons learned from the coffee component of the Third Agriculture Rehabilitation and Development Project, approved in 1980: “At project completion, two nurseries were completed able to supply 150 ha, half the expected area. Maintenance in the nurseries was poor—due to shortage of labor—while demand for the seedlings by the farmers was slow to materialize because of both the slow development of an extension service and difficulties in road transportation during the wet season. In 1987, coffee seedlings produced were only 50 percent of nursery capacity, with seedlings also being distributed to other provinces. No premium is paid to encourage quality production” (OED, Report No. 8884, p. 10).

14. The ICR team responds: “The team maintains its position as stated in the ICR, and provides the following additional information. The Ban Ito buildings were quite new at the time of the ICR mission in 1998, and the nursery had been fully established only a few years earlier. The ICR mission observed a very large seedling nursery with several hectares of seedlings under cultivation. This area planted to seedlings is consistent with the one million seedlings per year production figure given to the team by the Station Director (Mr. Bounchit Sithiboun) at that time. In addition to giving this production figure, the station director also discussed the specific prices at which seedlings were sold. During the ICR mission, the team also discussed the Ban Ito operation in detail with the French technical assistants”.

15. The ICR team responded: “The ICR team maintains that poverty is relative in Lao PDR, and that while the coffee farmers are relatively better off, they are still poor; furthermore, some of the poorest hill tribe farmers did benefit by being employed as laborers. The ICR mission also took the view that an improved agricultural economy would drive rural poverty reduction, particularly when poor farmers (not necessarily the very poorest) are involved—the development of the coffee industry was viewed as a way to link poverty reduction, export expansion, containment of soil erosion and reduction in hill-tribe income disparity.”

(b) Development of farming in Vientiane

2.12 The other region covered by the project was the hilly area north of the capital, where there was an extension and research component (centered on the Hin Heup station), a component involving rehabilitation of three small-scale irrigation schemes, and a feeder road component. The mission visited Hin Heup and the Nam Mone irrigation scheme.

2.13 The ICR notes that the Hin Heup station was not well sited, owing to its steep slopes, extreme soil variability and limited water supply. Also, the mission was informed that, because of the Hmong insurrection, the site was insecure during the early years of the project. Reporting that little use was made of the center after 1996 (when Australian technical assistance ended), the ICR says, "the government now plans to develop the center for training and to provide the necessary facilities and operating funds" (p.3). OED found that the site remains neglected: on-site roads are overgrown, the nursery and orchards are full of weeds, and a dated banner in a classroom suggested that the last training event had taken place six months ago (although the manager said there were four sessions a year). The number of professionals at the center has halved since the project closed (Table 3) and, according to the station manager, all research has been dropped. The site's primary use is for propagating fruit trees.

Table 3. Staffing, Hin Heup Station, 1998 and 2001

	<i>Project Close (1998)</i>	<i>OED Mission (2001)</i>
Agricultural extension agents	3	1
Community development specialists	3	1
Irrigation specialists	5	0
Nursery workers	4	4
Administrative staff	3	3
TOTAL	18	9

2.14 The appraisal targets for irrigation and feeder roads were not met. The irrigation component was scaled back from 13 schemes covering 5,020 hectares, to three schemes covering 924 hectares; coverage was, thus, one-fifth of the projected area but costs declined less than proportionately (by 46 percent). At appraisal it was planned to rehabilitate 740 kilometers of feeder roads; but only 400 kilometers had been rehabilitated by project end, at a cost of US\$17,250 kilometer, or two and one-half times greater than the appraisal estimate.

2.15 The ICR reports that, following remedial work on various design defects, the three irrigation schemes are now working satisfactorily. At Nam Mone, the OED mission confirmed that a water users association has been set up and is operating successfully. There are 250 members, drawn from 5 villages, and the irrigated area is 270 hectares. The height of the dam was too low originally, but was raised in 2000, financed by user contributions. Based on an inspection of the association's ledger, the mission concluded that fees are paid regularly, although there is a substantial lag in adjusting for inflation. The mission was told that a water users association is also satisfactorily operating at Nam Pang. However, the third of the three schemes (Nam Qang) is defunct: design defects have not been rectified and the volume of water available for distribution is so low that there is no support for a users association.

2.16 Finally, the ICR reports that, based on past experience in Laos, it was unlikely that roads rehabilitated by the project would be maintained. The mission confirmed that there is no government budget for maintenance of feeder roads, and no sign that villagers themselves are assuming this cost.

Efficiency: Modest

2.17 The efficiency analysis focuses on coffee, which, according to the ICR, was the most successful aspect of the project. The actual cost of this component was US\$9.9 million, or 35 percent of the total project cost.¹⁶

2.18 Between 1998, when the ICR was written, and October 2001 (the date of the OED mission), the coffee price at the farm gate halved, owing to a worldwide glut (partly fed by exports of low-grade coffee from neighboring Vietnam). The rate of return in the ICR is buoyed up (i) by the area covered by the project, which increased proportionately more than the investment cost, and (ii) by highly optimistic yield assumptions (Table 4). The OED estimate is based on the ICR's estimate of area covered (although the mission was unable to verify that this was as extensive as claimed), and takes the yield as estimated at appraisal (which is consistent with farm survey data recently obtained by the French technical assistance mission). Production costs were 25 percent higher than the appraisal estimates (mainly reflecting the increased cost of labor). The economic rate of return was re-estimated at 12 percent (compared to 29 percent in the ICR). Given the uncertainty about the actual area served by the project it seems that this was at best a marginal investment.

Table 4. Coffee Component: Assumptions Made by Economic Analysis

	<i>Appraisal (1989)</i>	<i>Completion (1998)</i>	<i>OED Mission (2001)</i>
Assumptions			
Farm-gate price, US\$/kg/1	0.82	1.03	0.51
Yield, new plantings at full development, kg/ha	800	1,400	800
Area: Improved husbandry, has	4,000	5,700	5,700
Area: Stumped, has	3,500	622	622
Area: Newly planted, has	5,500	9,067	9,067
Labor cost, US\$/day	0.73	NA	1.18
Fertilizer cost, US\$/kg	0.22	NA	0.19
Economic rate of return, %	34%	29%	12%
Switching values/2			
–Price	NA	NA	-5%
–Output	NA	NA	-5%
–Production costs	NA	NA	+10%

Note: US\$ values in constant 2001 prices.

NA Not available

/1 Weighted average, 15 percent arabica, 85 percent robusta.

/2 Amount by which key variables would need to change to reduce economic rate of return to 10%.

Outcome: Unsatisfactory

2.19 The ICR shows that the project's results were substantially less than expected for research, extension, and the rehabilitation of small-scale irrigation and feeder roads. This was confirmed by the mission. OED also found that owing to higher-than-expected labor costs and the collapse of world prices, the return to coffee development is lower than the ICR projects. In aggregate, therefore, outcome is rated unsatisfactory.

16. Comprising US\$5.1 million (coffee proper), plus prorated shares of expenditures on roads (56%), research (48%), extension (50%), and project coordination (33 percent).

Sustainability: Unlikely

2.20 The ICR argues that sustainability is likely, based on the results obtained from the coffee and irrigation components. Faced with the drop in prices, coffee growers have responded by cutting back on the maintenance of their robusta trees. Maintenance of arabica is holding up but this accounts for only 15 percent of output. Moreover, the weakness of extension capacity and the lack of a marketing strategy for higher grade coffee does not suggest much scope for consolidating gains from development of this crop on the Bolovens Plateau. Sustainability of the irrigation works is also problematic: one of the three schemes is not working and although the other two are collecting user fees, the receipts are insufficient to guarantee maintenance.

Institutional Development: Negligible

2.21 The ICR praises the project's success "in gaining acceptance of the bottom-up planning process" and the strengthening of water user organizations and women's groups (p. 6). Apart from the Nam Mone water users association, the OED mission found little evidence of this. The key point is that the government is now providing little or no funding to activities sponsored by the project. The project has not strengthened the capacity of the district and provincial offices responsible for extension; indeed, there was little explicit coordination with these agencies.

Bank Performance: Unsatisfactory

2.22 The Bank's performance at appraisal was clearly deficient (because it failed to recognize the limited capacity of the implementing agencies). Given that the project's design defects predated appraisal, overall quality at entry is rated as unsatisfactory. The ICR's positive assessment of supervision is not supported by the text—which records that supervision was inadequate in the early years of the project (for example, because cooperation with co-financiers was poor); the ICR also states that, although supervision improved after 1995, it remained concentrated on the civil works, neglecting the coffee and upland crop components. OED rates supervision as unsatisfactory. The OED mission found some inaccuracies in completion reporting (most notably, the failure to report that production of seedlings at the Ban Itou station had been abandoned early on in the project). Preparation costs were only 57 percent of the regional average while supervision costs were roughly double (Table 5). This suggests that the lack of investment in preparation required a more-than-average supervision effort to grapple with the problems caused by poor project design.

Table 5. Cost to the Bank of Preparation and Supervision

	<i>Preparation^a</i>		<i>Supervision^b</i>	
	US\$	Staff weeks	US\$ per year	Staff weeks per year
C2079	177,100	64.2	91,300	27.8
Mean: East Asia ^c	313,300	98.4	46,300	15.7

Source: ICR; *The Blue Book*, 1997.

a. Identification through board approval. b. Includes ICR preparation. c. Average, FY91-97.

Borrower Performance: Unsatisfactory

2.23 The borrower shares responsibility with the Bank for the poor quality at entry. OED rates borrower implementation unsatisfactory, based on lengthy implementation delays, frequent staff changes, and an insufficient attempt to monitor project results (which helps to explain the weak completion reporting).

3. Provincial Grid Integration Project

Relevance: Modest

3.1 The project's two biggest components were extension of the grid, and enhanced efficiency, accounting respectively for 69 percent and 13 percent of total project cost. Both were consistent with the country assistance strategy and government's program, which emphasized improving the infrastructure in the central and southern region, and raising the performance of the utility, Electricité du Laos (EdL).

3.2 Although most of the households served by the project were rural (or periurban), the project did not present itself as a rural electrification project; and, therefore, did not raise false expectations about the scope for extending the grid to the bulk of the rural area, or alleviating poverty.

3.3 Grid extension is not a first choice when seeking to eliminate poverty. Also, the *direct* impact in raising the incomes of the poor is probably weak.¹⁷ In Laos, data from national household surveys show that, in 1992 and 1997, better-off rural households were more likely to have grid connections than poorer rural households (Box 1). Also, between these survey dates, growth in the incomes of rural households with electricity did not exceed income growth of unelectrified rural households. This makes it unlikely that what growth there was can be attributed to grid connections.

Box 3. Project Objectives and Components: Provincial Grid Integration (Credit 2425)

Objectives

Extend electricity supply to more consumers in the Southern and Central Regions of the Lao PDR, including areas within the provinces of Champassak, Saravane, Sekong, Savannakhet, Khammouane, and Bolikhamxay
 Enhance the quality of supply for existing consumers in these provinces
 Develop additional power export prospects for the Lao PDR
 Improve the system efficiency of Electricité du Laos (EdL)
 Continue EdL's institutional development

Components

Construct four overhead crossing lines to interconnect with the Thai grid
 Extend the 22kV distribution networks of the central and southern provinces
 Implement an action program for EdL to

- monitor and reduce system losses
- increase collections
- improve billing practices

Upgrade the skills of EdL's staff
 Prepare a feasibility study and design study for the installation of additional capacity at the Nam Ngum hydro station.

Source: ICR

17. "The important claim for rural electrification that it raises the living standards of the rural poor is difficult to substantiate" See, OED, Rural Electrification in Asia: A Review of Bank Experience, Report No. 13291, June 30, 1994, p. 13.

3.4 Would the project have been more relevant if it had focused explicitly on rural electrification? No. In 1999, in the provinces covered by the project, rural population density varied from 12 to 36 persons per square kilometer. For some time to come, it will not be economically feasible to push the grid into such thinly populated areas. Off-grid options could have been explored but they are expensive and, from the standpoint of improving rural living standards, the resources entailed would probably have had a bigger impact if invested in other poverty-focused interventions.

3.5 The ultimate test of relevance is whether the project's objectives served to strengthen the long-run capacity of EdL to supply electricity efficiently. Connecting more households will, by itself, make little sense if the finances of the utility are not strong enough to ensure sustainability.

3.6 When Provincial Grid Integration was prepared, EdL's domestic operation was cushioned by the revenues from exporting electricity. In 1990, sales to Thailand accounted for almost three-quarters of EdL's total revenues. The designers of the project recognized that the scope for cross-subsidizing domestic operations from exports would rapidly erode—domestic consumption displacing exports (SAR, p. 30). Therefore, boosting the efficiency of the domestic wing was imperative. Did the project place enough emphasis on making EdL more efficient—should more than 13 percent of the project cost been devoted to this objective?

3.7 The previous project (C1286, 1987-1994) had also attempted to raise efficiency. The ICR from that project (written in 1995) says that operational and commercial efficiency of EdL improved after 1991 (owing to EdL's purchase of the assets, liabilities and businesses of the five provincial electricity authorities). But the data do not tell this story. EdL's key financial indicators show that the utility's performance worsened after 1989, with most of the deterioration occurring well before the East Asia crisis hit (Figures 1 and 2). This suggests that, in November 1991 when the project was appraised, boosting efficiency should have been a precondition for grid extension rather than a small complement to it. (The case for putting policy reform before grid extension applies even more strongly to the follow-on project—Southern Provinces Rural Electrification—which was approved in FY98—at which time there was even less room for doubt about EdL's weaknesses).

Figure 1. Debt Service Coverage (ratio of net revenue to debt service requirements)

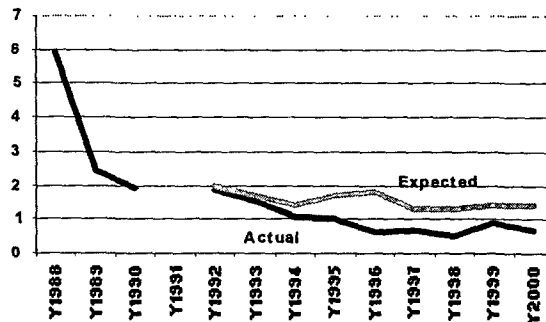
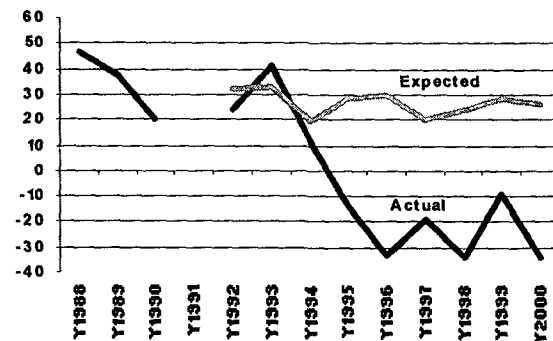


Figure 2. Self-financing Ratio (cash available from operations/3 year average of capital spending)



Efficacy: Substantial

3.8 Progress with grid extension greatly exceeded expectations. The number of villages electrified was double the appraisal target and the number of households connected was almost

three times the expected level (Table 6). EdL achieved this by containing costs and securing a high level of villager co-financing: beneficiaries were required to cover 30 percent of the cost of the 22kV spur, transformer and distribution equipment, while at least 60 percent of households had to agree to cover house wiring and connection fees. The demand for electrification was such that, in some cases, villagers by themselves raised the funds needed to finance the full cost of equipment, paying EdL just for the installation.

Table 6. Performance Indicators

	(1) <i>Expected</i>	(2) <i>Actual</i>	(2)/(1) %
Number of villages electrified	285	569	200%
Number of households electrified	14,138	40,100	284%
22kV medium voltage lines and spurs (kms)	816	1,396	171%
0.4kV distribution lines (kms)	936	1,312	140%
Number of 22 kV substations	2	2	100%
Number of 22kV/0.4kV transformers	285	416	146%

Source: Table 5, ICR, plus revised figures from Electricité du Laos.

3.9 The loan contained the following financial covenants all of which bear on the efficiency of EdL's operation:

- Funds from EdL's internal sources equal to not less than 20 percent of annual average capital expenditures
- EdL's net revenues equal to at least 1.1 times debt service requirements
- Tariffs increased to help achieve the above rate of debt service cover
- Reduction in unpaid government bills.

3.10 The targets specified in the first and second bullets were not met (Figures 1 and 2). Tariffs were increased by 70 percent. Also, the government converted about US\$32 million of EdL's debt to equity. But these actions were not enough to offset the increase in the debt burden caused by the steep depreciation of the kip after the outbreak of the regional financial crisis in 1997. No action was taken to reduce government receivables.

3.11 At appraisal no target was set for reducing systems losses. During implementation, losses were reduced in one of the project provinces (Vientiane) but probably not in the others (for which no data were available). Losses were to be tackled by improving metering in *all* project provinces; but this was only achieved in Vientiane—and then with much delay. System-wide, there was no reduction between project effectiveness and closing. Losses averaged 29 percent in the 1990s, substantially higher than for projects in two other countries evaluated by OED in the same year (Table 12).

3.12 Billing and collection from residential accounts is less problematic than for government agencies, although still below target. Over the life of the project, the number of months between billing and collection averaged 3.9, compared to the appraisal target of 3.2. The ICR reports a collection rate of 95 percent in Bolikhamxay province. The OED mission was only able to gather data for Savanannakhet province: for the project implementation period, the figures are roughly comparable to those cited for Bolikhamxay (Table 13).

3.13 Table 7 shows the system-wide loss of revenue deriving from EdL's domestic operation: equal to 85 percent of EdL's turnover in 2000.

Table 7. Scale of EDL's Losses on Domestic Sales of Electricity, 2000

(1) Units sold, domestic market only (GWh)	686
(2) Cost per KWh Sold (US\$/a)	0.080
(3) Average Price per KWh Sold (US\$/a)	0.021
(4) Annual loss $\approx (1 \times 3) - (1 \times 2)$ (millions of dollars)	36.8
(5) Turnover (millions of dollars)	43.2

Source: Electricité du Laos.

a. Robert Vernstrom, Inception Report, Power Study Tariff Study, Electricité du Laos, September 2001.

Efficiency: Substantial

3.14 In the three respects, the project made an efficient use of resources: (a) the economic rate of return was high; (b) from the perspective of households connected to the grid, cost savings from access to cheaper energy were significant; and (c) capital investments were cost effective, compared to similar investments in other countries. However, the project did not raise system-wide efficiency—which was one of its objectives (Box 3). The failings in this respect have been captured in the previous section.

3.15 Net benefits were substantially larger than expected because the number of households connected was almost three times higher than the appraisal projection, while the cost of connecting each household was 64 percent less than initially assumed (US\$746 against US\$2,075). The mission therefore endorsed the ICR's re-estimate of the economic rate of return: this ranges from a low of 18 percent in Bolikhamxay province (compared to 19 percent at appraisal) to a high of 44 percent in Khammuane province (compared to an appraisal forecast of 21 percent). Returns were lower in Bolikhamxay because in this province there was no previous grid to extend—the project started from scratch. Population density is lower here than in other provinces (12 persons per square kilometer, compared to an average of 25 persons per square kilometer for all project provinces), making grid-based electrification more expensive. Fewer villages and households were connected. The capital cost of connecting each household was substantially higher than the average (US\$1,047 against US\$746).

3.16 The project produced substantial recurrent cost savings for the rural households fortunate enough to be connected to the grid. Table 8 shows data (collected during the field visit) from three rural households in southern Laos that were connected during the project. Without household specific data on total consumption, it is impossible to calculate the exact savings. But based on national survey data—which showed a mean monthly income of US\$12.00 for rural households connected to the grid—it is reasonable to suppose a saving of at least 5 percent of total consumption costs. (The Ban Mouang household was a substantially bigger consumer than the other two—electricity expenditures cover the operation of an irrigation pump as well as domestic lighting—so its total monthly spending was probably above the US\$12.00 mean, driving down the proportionate saving).

Table 8. Savings per Rural Household from Grid Electrification

US\$	Ban Bengkhambay	Ban Nongsabeng	Ban Mouang
Current monthly bill (grid)	0.20	0.28	1.28
Pre-grid monthly cost	0.78	1.11	6.11
-Battery/a	0.44	1.11	1.11
-Kerosene/b	0.34	-	5.00
Monthly saving	0.58	0.83	4.83
Total monthly consumption/c	US\$12.00	US\$12.00	US\$12.00
Savings/Total consumption (%)	5%	7%	40%

Source: OED field interviews

/a Current cost of battery: K1,000 per recharge.

/b Current cost of kerosene: K3,000 per liter.

/c Rural households with electricity, nationwide, 1997 household survey

3.17 In three respects, Lao PDR's performance on this project compares acceptably to other countries. First, project expenditures on distribution lines were intermediate between levels recorded for Bangladesh and Philippines (Table 9). Second, costs per consumer connection were intermediate between Bangladesh and Pakistan, countries with rural electrification projects assessed by OED in the same year: these are extreme cases, Bangladesh with very low costs (partly because of the very high population density) and Pakistan scoring poorly on cost effectiveness (Table 10). The same ranking holds when these countries are compared by the number of connections per kilometer of energized line (Table 11).

Table 9. Cost of Distribution Lines, US\$/km

	Bangladesh	Pakistan	Philippines	Laos	USA
SINGLE PHASE					
ESMAP, 2000	3,060	NA	5,690-6,770(c)	4,520-6,370	10,440-15,280 ^d
Audit, 2001	6,914	NA	NA	6,000-7,000	NA
TRIPLE PHASE					
OED, 1994	12,500 ^a	3,800/7,500 ^b	NA	NA	NA
ESMAP, 2000	6,090	NA	9,680-13,020 ^c	8,650	14,600-22,410 ^d
Audit, 2001	10,768	5,354	NA	11,000-12,000	NA

Sources: OED Rural Electrification in Asia (Report No. 13291), World Bank, 1994; ESMAP, Reducing the cost of Grid Extension for Rural Electrification (Report No. 227/00), World Bank, 2000; Information given to audit mission by Rural Electricity Board (Bangladesh), Water and Power Development Authority (Pakistan), and Electricité du Laos.

NA Not applicable. (A) Large conductor; (b) Large conductor/Small conductor; (c) Range, three separate sources; (d) Range, two separate sources.

Table 10. Project Cost, US\$ per consumer connection

	Laos (C2425)	Bangladesh (C2129)	Pakistan (L3148/C2078)
Number of connections, all types	40,100	429,181	152,720
Project cost, US\$ million	30 (a)	179	264 (b)
Cost per connection	728	417	1,729

Source: Audit estimates

(a) Cost of provincial electrification component only (63 percent of total project cost)

(b). Based on funds actually disbursed from Bank loan plus counterpart funding proportional to Bank's (34%) share of donor funding.

Table 11. Kilometers of Energized Line Per Connection

	<i>Laos (C2425)</i>	<i>Bangladesh (C2129)</i>	<i>Pakistan (L3148/C2078)</i>
Lines (kms)	2,708	115,999	43,493
Number of connections/a	40,100	2,981,221	181,676
Connections per km	14.8	25.7	4.2

Source: Electricité du Laos; REB, Bangladesh; WAPDA, Pakistan.

a. All types: domestic, commercial, industrial, agricultural.

3.18 With respect to system losses and collection rates—measures, which here refer to the system as a whole, not just the project intervention—Lao PDR appears, by some estimates, to perform less well than either Pakistan or Bangladesh (Tables 12 and 13). However, the data are inconsistent, warranting closer investigation.¹⁸ If system losses had been adequately addressed by the project (if a target had been set at appraisal), scarce resources could have been saved. Neglect of system losses overstates the project's economy-wide gains, these losses canceling out part of the high economic rate of return.

3.19 Also, Lao PDR's long run marginal cost of supplying electricity is relatively high, estimates ranging from US\$0.08 to US\$0.11¹⁹; in Bangladesh and Pakistan, the cost is respectively US\$0.04 and US\$0.03 (Table A3). Bank staff argue that the cost estimates are exaggerated because they give too much weight to a single, poorly designed power station (Nam Leuk). This issue merits closer examination but is beyond the scope of this report.

3.20 In conclusion, while on its own terms grid extension was efficient, EdL's system-wide efficiency has remained low and was not effectively addressed by this project. The policy dialogue was limited to financial issues rather than tackling more fundamental issues of economic efficiency: this is partly a failure of project preparation, reflecting the lack of appropriate sector work.

Table 12. Power System Losses*

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Mean
Laos	38.1	27.9	24.2	28.8	34.5	30.6	30.1	28.9	25.1	24.0	27.1	29.0
Bangladesh	16.8	16.3	15.7	15.6	15.4	15.7	15.2	15.8	16.8	18.8	16.2	16.2
Pakistan	23.2	22.8	23.1	23.3	24.2	24.0	24.4	24.1	26.0	27.5	26.0	24.4

Source: Electricité du Laos; REB, Bangladesh; WAPDA, Pakistan.

* Calculated as $a/((b-c)) \times 100$, where a =(gross generation plus imports) less (exports plus domestic consumption), b =gross generation plus imports, and c =exports.

Laos and Pakistan figures are system-wide (urban plus rural consumers). Bangladesh refers to rural coops only.

18. For example, on system losses, the Bank's energy sector review (January 2002) reported the 2000 figure as 17 percent. Vernstrom (see next footnote) reports that losses were 12 percent in 1990, 13 percent in 1995 and 14 percent. Another report reviewed by the mission (source unclear) states that "the system loss has been reduced gradually from 35 percent in 1994 to 24 percent in 1999."

19. Estimates, respectively, by Vernstrom (Power Supply Tariff Study: Inception Report, September 2001) and PA Consulting Group (Asian Development Bank, TA 2569-LAO: Corporate and Financial Development of Electricité du Laos, May 1997).

Table 13. Collection Rates (in percent)^a

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	Mean
Laos/b	NA	NA	NA	NA	97.4	97.0	95.1	92.5	92.9	90.2	89.9	93.6
Bangladesh	96.0	95.0	97.2	100.6	98.9	95.7	98.2	95.2	95.6	93.9	96.9	96.6
Pakistan	95.2	93.8	94.1	96.9	98.2	99.0	94.6	99.1	79.6	92.0	NA	94.2

Source: *Electricité du Laos*; *REB, Bangladesh*; *WAPDA, Pakistan*.

a. Amount collected as a percentage of amount billed to consumers (A figure over 100% indicates collection of arrears from previous billing cycle). b. Savannakhet province only. NA = Not available.

Outcome: Satisfactory

3.21 The outcome rating is based on the project's success in exceeding its physical targets and its high cost efficiency.

Sustainability: Unlikely

3.22 Given that EdL's finances have continued to deteriorate OED rates sustainability unlikely because, in the present environment, maintenance and repair operations are likely to be skimmed. The ICR notes that the lack of government actions to support financial restructuring of EdL casts doubt on its commitment to commercialize the utility: signs of this commitment are no stronger today than they were when the completion report was written, suggesting that the project's net benefit flows over time will have limited resilience to risk.

Institutional Development: Modest

3.23 The discussion in the ICR is input-centered, describing the training and studies designed to serve the objective of continuing EdL's institutional development. The previously cited evidence on system-wide efficiency does not back up the ICR's claim that billing and collection systems were improved. The main institutional contribution made by the project was to restructure the company so that Generating Stations and Distribution Branches are operated as separate profit centers, each with their own balance sheets. This makes it possible to identify sources of loss more easily.

Bank Performance: Satisfactory

3.24 The Bank provided considerable assistance to the borrower on the technical, financial and institutional aspects of the project, deepening the relationship already established with EdL. Based on comparison with regional means (Table 14), results were obtained in a cost effective manner. However, the need for policy reform was underestimated and the assumption that investment loans could be used to coax government into making the necessary changes has proved unwarranted.

Table 14. Cost to the Bank of Preparation and Supervision

	Preparation ^a		Supervision ^b	
	US\$	Staff weeks	US\$ per year	Staff weeks per year
C2425	133,800	42.7	34,950	10.1
Mean: East Asia ^c	313,300	81.6	45,400	13.0

Source: ICR; The Blue Book, 1997.

Identification through board approval. b. Includes ICR preparation. c. Average, FY91-97.

Borrower Performance: Satisfactory

3.25 Both government and implementing agency served the project's primary objective—grid extension—well. The government was fully committed to this objective and at no point was there a shortage of counterpart funds. However, it was less effective in supporting EdL's financial restructuring. As implementing agency, EdL, performed consistently well. By the end of the project it had been collaborating with the bank for ten years, building up a staff of engineers skilled in procurement, disbursement and implementation. The government's failure to comply with the project's financial covenants was mainly the consequence of a deteriorating macroeconomic environment—largely attributable to the regional crisis.

4. Forest Management and Conservation Project

Which Objectives Should Be Rated?

4.1 The ICR says that, after the first year of implementation, the project's objectives and components were deemed over ambitious and were revamped. Box 4 shows that both the old and the new formulations lack specificity. The revised formulation at least distinguishes the two primary areas of activity—community-managed forests and National Biodiversity Conservation Areas—but it is not clear what each subprogram will entail. The two subprograms were originally envisaged as separate projects. They were combined for administrative convenience but there was no synergy between them. The subprograms were funded by separate grants and run by separate technical assistance teams, each with its own strategy.

Box 4. Objectives and Components: Forest Management and Conservation Project (C2586)

<i>Original formulation (SAR)</i>	<i>Revised formulation (ICR)</i>
<p><i>Objectives</i> To assist Lao PDR with the introduction of a more sustainable natural resource management system and conservation of the country's forest resources. As the first of several sequential operations that IDA may support in Lao PDR over the next 10-15 years, the project will focus at this stage on completing forestry sector reforms, developing the Department of Forestry's operational capacity, and implementing programs in forest inventory and planning, sustainable forest management and protection, and establishment of protected forest areas for biodiversity conservation</p> <p><i>Components</i> Implementation of an appropriate institutional framework and formulation of the necessary regulatory framework for the forestry sector. Implementation of national programs in forest resource inventory and planning, sustainable forest management and protection, and establishment and management of protected forest areas. Human resource development. Technical assistance.</p>	<p><i>Objectives</i> To have sustainable forest management and biodiversity conservation systems in place and implemented throughout the country, which will involve and benefit villages and other stakeholders, as well as utilize the experiences gained by various national and donor-funded projects. Priority will be given to community-based forest management and biodiversity conservation, the latter being based on integration of conservation and development efforts.</p> <p><i>Components</i> Forest Management Subprogram National Biodiversity Conservation Area Management Subprogram</p>

Source: Staff Appraisal Report; Implementation Completion Report

4.2 The main difference between the two formulations is that the second gives less emphasis to reform of the policy framework; reform efforts were subsumed under the Forest Management Subprogram. The reformulation was not driven by changed circumstances involving forces beyond the control of the borrower or the bank; it was driven by the borrower's lack of commitment. Therefore, following OED (and ICR) guidelines, the project is rated against its original objectives.²⁰

Relevance: Substantial

4.3 The project built on recommendations in the 1993 Environmental Overview. Given the limited means for enforcing regulations and applying penalties, the Overview called for communities in and around forested and protected areas to be given incentives to participate in the planning and management of the resource.²¹

4.4 The project was intended to respond to the following challenges. Each year about 0.7 percent of the forested area in Lao PDR is cut down, either by farmers or loggers. Between 40 to 50 percent of farm households practice shifting cultivation, some exclusively, others to supplement lowland paddy production. Logging activities are very difficult to monitor or plan rationally, owing to widespread unrecorded logging. The 1990 Tropical Forest Action Plan estimated that 288,000 m³ could be sustainably cut each year from the country's commercial forests. The actual harvest is estimated at 425,000m³, much of this finding its way into Thailand or Vietnam. The loss of biodiversity caused by deforestation led the government to create a number of protected areas. These cover a surface that is too large to be administered with available government resources. The World Parks Congress of 1982 recommended that, in forested countries like Lao PDR, 10 percent of the total land area be reserved for conservation. In 1998, the 20 National Biodiversity Conservation Areas accounted for 13 percent of the surface.

4.5 The substantial rating refers to the original design of the project. Reducing the emphasis on reform weakened the project's relevance. There are several weaknesses in the legal and institutional framework that the project failed to tackle. First, the Forest Law overlaps and partly conflicts with the Agriculture Law and Land Law. Second, monitoring of logging, processing, and log export is weak. The Department of Forestry has a marginal role in forest policy and management. Third, enforcement agencies lack resources, enabling forestry companies to ignore legislation, regulations and official decisions. Fourth, the Prime Minister's Order 11/99 states that the government is responsible for conducting all wood sales, ostensibly ruling out community-based management of production forestry.²²

4.6 Because the project failed to address the distortions in timber pricing, the objective of managing natural resources more sustainably was compromised. In order to promote wood processing, government taxed logs for the domestic market at US\$17/m³, and exported logs at US\$62/m³. Because regulation was lax it was possible for operators to buy logs at the domestic

20. "If the project was restructured because of faulty project design or poor implementation so that its objectives could not be achieved, the assessment of outcome should be related to the original objectives to properly reflect the accountability and the learning functions of ICRs. On the other hand, if implementation was proceeding well, but unforeseeable external factors largely outside the borrower's control required a change in project objectives, the assessment of outcome should be related to the new objectives" (Guidelines for Implementation Completion Reporting, 2000).

21. Lao PDR, Environmental Overview, December 30, 1993 (Report No. 11978), pp. 20-21.

22. These four points are taken from Lao PDR, Public Expenditure Review: Agriculture and Rural Development, World Bank, September 2001 (draft).

price and clandestinely sell them at the export price. A ban of logging in Thailand, effective since the late 1980s, increased the demand for Lao product. Sawmills and log trading yards sprang up at border crossing points. Logs were underpriced, with government royalties estimated to be only one-third of what they should be—if indeed they were paid at all.²³

4.7 The 1993 Environmental Overview—which fed into preparation of this project—pressed for all logs to be sold at export parity price to reduce wastage and the capture of rents by private operators. When the project was negotiated it was stipulated that a system of parity pricing for logs sold to domestic and export markets be set up by June 1995. . The government complied belatedly but then reversed itself. Providing incentives to communities to manage their timber resource needs to be matched by a pricing system that reduces the scope for rent seeking.²⁴

Efficacy: Modest

(a) Policy reform

4.8 The Staff Appraisal Report specifies three policy conditions, none of which were observed. First, passage of a forestry decree was made a condition of effectiveness; but this condition was dropped, none of the relevant legislation being passed until the project was well underway. A Forestry Law was adopted in 1996 and a forestry decree issued in 1999; but reforms were eroded or reversed by subsequent prime ministerial orders. Second, a system of pricing all logs at export parity was to have been introduced by June 1995. After Bank pressure, parity pricing was introduced in 1998, but subsequently dropped. . Third, at least two forest management contracts, based on sustained yield, were to be awarded by competitive bidding by June 1996. This also failed to happen.²⁵

(b) Village forestry development

4.9 This is the one component with an outcome rated by the ICR as highly satisfactory. Village forestry in Lao PDR is presented as one of the best pilot programs of its kind in the world. But it is difficult to rate what was achieved by this subprogram because the Staff Appraisal Report contains no targets: the number of villages covered, the size of the population served, the area of production forest reached—none of these are specified. The project's design was intended to be flexible and process-oriented.

4.10 This component aimed to give communities living in or near protected and production forests the incentive to be better managers of the resource. It entailed organizing villages, providing 26,000 days of training, and building village infrastructure (feeder roads, water supplies, school rehabilitation, etc.), financed by grants. By project end, 33 Village Forest Associations had been set up, with members from 41 villages, in the provinces of Savvanakhet and Khammuane. . Aided by staff from local forestry offices, villagers have marked boundaries, made inventories of forest resources, prepared ten-year land use plans, and have helped supervise log felling and grading. They have received revenues from the sale of logs. A recent sector report

23. World Bank/SIDA/Government of Finland, Lao PDR, Production Forestry Policy, June 11, 2001.

24. The project team responded that "On average, the royalty levels capture most of the economic rent; the main problem is that royalties do not follow markets resulting sometimes in overvaluation and sometimes in under-valuation".

25. The project management team responded that in the areas under village forest management all logs were sold through competitive bidding from the first year of harvesting, this practice continuing after the project closed.

says of village forestry “although the area developed to date is small, it is the only production forest area in Lao PDR that is under properly planned and executed forest management.”²⁶

4.11 The village forestry model was piloted in Savannakhet province and then extended to Khammuane province. (Table 15). The total area covered by forest management plans is 111,050. The volume logged jumped from 1999-00 to 2000-01 as Khammuane came on stream.

Table 15. Scope of Village Forestry

	<i>Khammuane</i>	<i>Savannakhet</i>	<i>Total</i>
Number of villages (First batch)	13	15	28
Number of villages (Second batch)	22	16	38
Area covered by forest management plans (has.)	23,663	87,387	111,050
Harvest (m3 of logs cut)			
1998-99/1	Not available	Not available	3,826
1999-00/1	Not available	Not available	3,616
2000-01/2	7,000	8,000	15,000
2001-02/2 (estimate)	11,000	4,300	15,300

1. ICR data.

2. OED mission data.

4.12 The village forestry model appears to provide villagers with the incentive to participate in sustainable forestry management. The program allows villagers to keep the net profits from timber sales after paying the government royalties, taxes and other fees, as well as labor costs (whether for contracted tree felling and log transport, or village forest management activities). The introduction of competitive bidding for logs ensures that prices are fair. Revenues remaining after taxes and royalties have been deducted are shared between villagers and local forest offices, creating a financial incentive for all parties and making operations independent of central government financing. About 69 percent of 1998-99 timber revenues went to pay royalties and taxes.²⁷ Royalties are administratively fixed and bear no relation to the export parity price. Some of the royalty could potentially be earmarked for centralized public expenditures on forestry (monitoring, planning, etc.) but so far this is not happening.

4.13 In Khammuane, the mission learned that, in the 2000-01 harvest season, the villagers received a net revenue of US\$36/m3, of which 43 percent was set aside for funding community projects (schools, wells, dams, etc.), 40 percent was used to cover the cost of forestry operations (including wages), and the remaining 17 percent was paid to provincial and district forestry offices. In Savannakhet, the net revenue was quoted as US\$11/m3 in 1999-00, and US\$20/m3 in 2000-01—in the second season, a higher proportion of logs were exported, earning a premium over domestic prices. All of these values are above the minimum level that villagers deem necessary to justify participation in managing the forest. The ICR background paper states that, in 1999, villagers said “they would need to earn US\$10-15/m3 in order to have adequate incentives to participate.”²⁸

4.14 Village development projects made less progress than expected. An ICR background paper notes that the proposed budget was US\$10,000 for each of 120 villages. Compared to this indicative total of US\$1.2 million, actual spending was US\$310,000, spread across 41 villages (US\$7,560 per village). The spending shortfall is attributed to “the limited absorptive capacity of both the villages

26. World Bank/SIDA/Government of Finland, Lao PDR, Production Forestry Policy, Volume I, June 11, 2001, p. 38.

27. Appendix B, Village Forestry, p. 8. (A background report for the ICR, which was not appended to the final version).

28. Appendix B, *ibid.*, p. 9.

and the government agencies.” It is also noted that subproject contracting was handled entirely by the government, suggesting that the villages had less autonomy—and less scope for learning by doing—than is typically recommended for community-based development projects.²⁹

4.15 The design of the village forestry component is evolving. A recent change of direction (unrecorded in the ICR or the supporting appendix) responds to the challenge of providing villagers with incentives to manage the forest. Some government staff say that during work on the first batch of villages, conflict arose between villages whose lands included prime forest and neighboring villages on the margins who were less well endowed with forest and therefore left out of the program. Because the marginal villages took no share of harvest revenues there was no incentive for them to help police the resource. They were more likely to turn a blind eye to—or reach deals with—clandestine loggers. In the second batch, benefits have been shared between prime-site and marginal villages. But there has also been a substantial dilution of the training effort. Resources have been spread more thinly over a larger number of villages and earlier attempts to build specialized institutions (the Village Forestry Associations) appear to have been abandoned.³⁰

4.16 Ownership of the forest is still in need of greater clarification. On the one hand, participatory demarcation of village boundaries was successfully accomplished by the project and is considered by the project team as one of the project’s main achievements. The team notes that some provincial forest land allocation schemes have adopted the same approach. The demarcation of boundaries, and their approval by adjoining villages, district and province governments helped to improve control and encroachment. On the other hand, although the villages included in the management scheme have been given a 50-year contract, officials say that government may revise the terms of the contract at any time. Neither the villages as a whole, nor the households within them, have secure land title.

(c) Protected areas

4.17 The outcome of the subprogram for National Biodiversity Conservation Areas is rated by the ICR as unsatisfactory. Once again, there were no appraisal targets against which achievements can be rated. But it is evident that not much was achieved.

4.18 At most, the project laid the foundations for future action. The ICR says that implementation met a variety of obstacles and “never recovered from a slow and uncertain start.” The project gave highest priority to Se Pian (240,000 hectares, spanning the provinces of Champassak and Attapeu), followed by Phou Hin Boun (150,000 hectares, Khammouane). For each of these protected areas, a management plan was developed, although the ICR concedes that the plans “lack timetables and budgets.” Field bases were designed and constructed. The ICR says that procedures were developed for consulting villages about participatory biodiversity schemes, village assessments and infrastructure development. A biodiversity monitoring system was designed for Se Pian. In short, there was much planning but little action.

4.19 A representative of Danish aid in Pakse noted substantial procurement delays because of the many levels of clearance and the need always to get authorization from the capital. The methodology for the protected areas—developed by the International Union for the Conservation of Nature—was described by the Danish informant as “world class best practice.” But the

29. Appendix B, *ibid.*, p. 7.

30. The project team responds, “No village left a program and out of 68 villages only two villages had boundary conflicts. In FOMACOP [village forestry management] areas no clandestine logging took place during the project and neither was there any serious encroachment from neighboring villages. The issue of equity in relation to forest resources has been used as an argument by some government people against adopting the village forestry model.”

methodology is not practicable given skills and budget constraints. The Lao government is now recognizing that the twenty protected areas they have designated are too large to be manageable; protection can only be strengthened if the area to be covered is substantially reduced. The “protected” areas have been violated on multiple occasions: by coffee growers on the Bolovens Plateau in Champassak; and, more importantly, by loggers and poachers, some of whose activities are carried out with the complicity of government officials. There is ample evidence that a substantial volume of logs and wildlife is exported covertly to Vietnam.³¹

Efficiency: Modest

4.20 An economic rate of return was not estimated at appraisal. The ICR estimates a rate of return for the village forestry component (“based on an indicative optimal model”) of 9 percent. (The rate of return workings are not shown in the ICR). If this is, indeed, the optimal rate of return, it is hard to credit the ICR’s description of the investment as “attractive to government.” It is assumed that if environmental and social benefits are factored in the return on investment would exceed the opportunity cost of capital. A more fully argued case for the efficiency of village forestry development is made in a 2001 sector report, which derives a financial rate of return of 12.6 to 16.6 percent.³² However, this is based on a hypothetical scenario in which, nationwide, 1.8 million hectares are brought under this form of management. They assume a cost of US\$5 per hectare (divided equally between investment and incremental management expenditures). This appears reasonable but more research is needed to compare the cost of this approach with alternatives.³³

4.21 The project’s scope for delivering efficiency gains was substantially curtailed when policy reform was de-emphasized. . The main losses come from the failure to price logs at export parity and the lack of incentive to reduce the waste in timber harvesting.

Outcome: Unsatisfactory

4.22 The importance of policy reform was acknowledged in the original design: in its initial form the project was more relevant than the slimmed down version that was implemented. The erosion of relevance, combined with the weak evidence on efficacy and efficiency, point to an outcome rating of unsatisfactory.

Sustainability: Unlikely

4.23 There is some doubt that the net benefits of the project will be resilient to the risk posed by inconsistent government commitment. A follow-on project is being prepared which aims to consolidate the achievements of the village forestry pilots. But there is still insufficient evidence that the government is willing to introduce the pricing reforms and strengthen villagers’ tenure over the forest. The scope for scaling up the pilots seems limited given the heavy startup costs required for training the villagers and the local government officials engaged in managing the forest, and providing the policing that is generally needed to complement incentive-based approaches. (A sector report notes that village management is “some US\$2.5/ha more expensive than the current

31. Hanneke Nooren and Gordon Claridge, *Wildlife Trade in Laos: The End of the Game*, IUCN, Amsterdam, 2001.

32. World Bank/Sida/Government of Finland, Lao PDR: Production Forestry Policy, Vol. II, 2001, pp. 59-60.

33. The project team responded: “The initial cost of FOMACOP [village forestry management] was high [they estimate US\$50.00 per hectare over the first two years] because of intensive technical assistance to develop systems and procedures, procure vehicles and equipment, develop infrastructures, train staff, and pilot the operations over five years”. They estimate the subsequent cost per hectare as ranging from US\$2.60 to US\$6.00 per hectare, depending on management scale.

forest management system”—although the rate of return on government-funded investments is projected as 13-17 percent).³⁴ The work on protected areas is even less likely to be sustainable given that no progress was made in piloting the proposed approach of “integrated conservation and development”; and there are no plans for a follow-on operation for this component.

Institutional Development: Negligible

4.24 Although the village forestry development pilot strengthened local management, there is no evidence so far that the model will be replicated. The original intention of setting up a national training program for village forestry was not achieved, although a training manual was prepared and may be taken up by the follow-on project. The team working on the protected areas component was unable to develop a replicable model of integrated conservation and development, owing to delays in funding and disputes involving villagers in the conservation areas. The lack of progress on policy reform means that there was little scope for increasing the efficiency with which human and natural resources were deployed.

Bank Performance: Unsatisfactory

4.25 Quality at entry was highly unsatisfactory based on the lack of clarity of the development objectives; the failure to specify precisely what outputs would be needed for objectives to be realized, and internal inconsistencies in the appraisal’s definition of project components. The ICR argues that supervision was satisfactory because the project was scaled back and made more manageable. However, this was not a formal restructuring and project team members appear to have held differing interpretations about the extent to which the original objectives (which included policy reform) were still valid. Moreover, the scaling back was not driven by forces beyond the control of Bank or borrower, meaning that in order to guarantee accountability for the original design flaws the overall rating of Bank performance must—according to OED and ICR guidelines—be based on the original design. Therefore, OED rates overall Bank performance as unsatisfactory. However, it must be acknowledged that project supervision did successfully promote village forestry; without this substantial effort the project’s achievements would have been even more diffuse and limited.

4.26 The Bank should not have allowed the loan to become effective until policy conditions were met. There were a number of upfront conditions specified in the ICR and, judging by the more than two year delay between appraisal and approval, the bank waited some time for the government to meet them, before finally deciding to go ahead anyway.

4.27 Administration of the project cost 21 percent more than the regional mean for lending, and 13 percent more for supervision (Table 16).

Table 16. Bank Expenditures Compared to Regional Mean

	<i>Lending¹</i>		<i>Supervision</i>	
	<i>Staff weeks</i>	<i>US\$</i>	<i>Staff weeks per year</i>	<i>US\$ per year</i>
C2586	224	355,000	13.7	34,833
Mean, EAP Rural	184	294,000	17.0	30,825

/1 Identification through negotiation

Source: ICR, Blue Books.

34. World Bank/SIDA/Government of Finland, 2001, op. cit., Vol. I, p. 25.

Borrower Performance: Unsatisfactory

4.28 The government was not consistently committed to policy reform, or to supporting the innovative village forestry model.

Annex A. Supplementary Tables

Table A1. Upland Agriculture Development Project: Economic Analysis

	(1) Output (tons)	(2) Gross Revenue (US\$'000)	(3) Investment Cost (US\$'000)	(4) Production Cost (US\$'000)	(5) Net Revenue (US\$'000) =(2)-[(3)+(4)]
Y1	16	8.16	2842	12.5	-2846.34
Y2	126	64.26	3505	22.5	-3463.24
Y3	436	222.36	1098	103.75	-979.39
Y4	928	473.28	1153	115	-794.72
Y5	1790	912.9	1305	151.25	-543.35
Y6	3176	1619.76	119	1285	215.76
Y7	5453	2781.03	119	1291.25	1370.78
Y8	7522	3836.22	119	1546.25	2170.97
Y9	8965	4572.15	119	1750	2703.15
Y10	8973	4576.23	119	1750	2707.23
Y11	8973	4576.23	119	1750	2707.23
Y12	8973	4576.23	119	1750	2707.23
Y13	8973	4576.23	119	1750	2707.23
Y14	8973	4576.23	119	1750	2707.23
Y15	8973	4576.23	119	1750	2707.23
					ERR=12%

Note. See Table 4 (main text) for assumptions on which this analysis is based.

Table A2. Electrification Coverage in Central and Southern Provinces, 2000

	<i>Champ- assak</i>	<i>Sara- vane/a</i>	<i>Savann- akhet</i>	<i>Khamm- uane</i>	<i>Bolikhamxay</i>	<i>Total</i>
(1) Area (km2)	15,415	18,356	21,774	16,315	14,863	86,723
(2) Rural population ('000), 1999	558	356	747	303	182	2,155
(3) Rural population density	36	19	34	19	12	25
(4) Total number of villages	907	970	1,541	799	413	4,630
(5) Total number of villages electrified (by 2000)	116	175	101	131	46	569
(6) % of villages electrified =(5)/(4)	12.8	18.0	6.6	16.4	11.1	12.3
(7) Number of households	87,000	58,000	114,000	52,000	30,000	341,000
(8) Number of domestic connections (by 2000)	8,662	13,145	8,130	5,794	4,369	40,100
(9) % of households in project area served by electricity =(8)/(7)	10.0	22.7	7.1	11.1	14.6	11.8

Source: National Statistical Centre, Vientiane, Laos; Electricité du Laos
a. Includes Sekong.

Table A3. Laos, Pakistan, and Bangladesh. Cost and Retail Price of Electricity, US\$/kWh

	Laos			Bangladesh			Pakistan		
	Cost	Retail price	Margin/ Cost	Cost ^a	Retail price	Margin/ Cost	Cost ^b	Retail price	Margin/ Cost
1997	0.08	0.033	-59%	0.04	0.07	75%	0.03	0.06	100%
1998	0.08	0.012	-85%	0.04	0.07	75%	0.03	0.06	100%
1999	0.08	0.015	-81%	0.03	0.06	100%	0.03	0.07	133%
2000	0.08	0.021	-74%	0.04	0.06	50%	NA	NA	NA
2001	0.08	0.026	-67%	NA	NA	NA	NA	NA	NA
Mean	0.08	0.021	-74%	0.04	0.07	75%	0.03	0.06	100%

Source: Electricité du Laos; REB, Bangladesh; WAPDA, Pakistan.

a. Price at which cooperatives buy electricity.

b. Cost to WAPDA of supplying electricity.

NA Not available.

Cf. Philippines generating cost, US\$0.04/KWH

Table A4. Average Tariff (U.S. cents/kWh)

	1997	1998	1999	2000	2001
Domestic	1.9	0.7	1.0	1.3	1.8
Commercial	6.4	1.9	2.4	3.3	4.0
Entertainment	8.9	2.2	2.9	3.7	4.6
Embassies	11.0	7.6	9.6	9.2	9.5
Government offices	3.7	1.4	1.9	2.7	3.4
Agriculture	1.0	0.6	0.6	1.0	1.3
Industry	4.0	1.4	1.9	2.7	3.4
SYSTEM AVERAGE	3.3	1.2	1.5	2.1	2.6

Source: *Vernstrom, 2001, op. cit.*

Table A5. Lao PDR. Income Differences Between Households With and Without Electricity

	Without electricity		With Electricity	
	Urban	Rural	Urban	Rural
1992				
N of households	468	2193	191	85
Mean monthly consumption (US\$)	136.04	85.14	176.49	132.25
Consumption of own production/Total consumption	22.0%	61.6%	17.4%	40.3%
Mean monthly expenditure on electricity (US\$)	NA	NA	3.48	2.52
1997				
N of households	1411	6554	597	319
Mean monthly consumption (US\$)	127.63	85.49	198.70	144.40
Consumption of own production/Total consumption	23.8%	56.7%	10.5%	32.2%
Mean monthly expenditure on electricity (US\$)	NA	NA	2.82	2.77
1992-1997				
Change in mean monthly consumption	-6.2%	0.0%	12.6%	9.2%
Change: own production/total consumption	1.8%	-4.9%	-6.9%	-8.1%
Change in expenditure on electricity	NA	NA	-0.2%	9.9%

Source: Lao PDR National Household Expenditure Surveys, 1992 and 1997

Note. A t-test demonstrated that, in given year (1992 or 1997), the difference between the means of households with and without electricity is statistically significant at the p=0.05 level; but for each type of household (with or without), the change between 1992 and 1997 is not statistically significant.

NA Not Applicable.

Annex B. Basic Data

LAO PDR: UPLAND AGRICULTURE DEVELOPMENT PROJECT

Key Project Data (amounts in US\$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total project costs	34.0	28.5	84
Loan amount	20.2	14.6	72
Cofinancing	10.0	10.1	101
Cancellation	US\$2.8 million		
Date physical components completed	June 30, 1998		

Cumulative Estimated and Actual Disbursements

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Appraisal estimate (US\$M)	2.9	7.2	11.0	14.5	18.2	20.0			
Actual (US\$M)	1.4	2.6	2.8	3.3	4.5	6.1	9.5	14.6	15.4
Actual as % of appraisal	65.5	36.1	25.5	22.7	24.7	30.2	47.0	71.5	75.7
Date of final disbursement:	October 31, 1998								

Project Dates

	Original/Date Planned	Actual/Latest Estimate
Identification	n.a.	3/16/88
Appraisal	5/89	06/01/89
Negotiations	6/89	10/12/89
Midterm review (if applicable)	12/31/92	12/31/92
Board Presentation	7/89	12/21/89
Signing	7/89	02/23/90
Effectiveness	FY91	05/02/90
Project Completion	06/30/95	06/30/98
Closing date	12/31/95	06/30/98

Staff Inputs/Bank Resources (staff weeks/ US\$'000)

Stage of Project Cycle	Planned		Revised		Actual	
	Weeks	US\$'000	Weeks	US\$'000	Weeks	US\$'000
Through Appraisal					45.8	121.5
Appraisal-Board					18.4	55.6
Board Effectiveness					1.1	3.3
Supervision	26.0*	69.0*	26.0*	69.0*	186.5	617.3
Completion	3.0	6.7	3.0	6.7	6.9	18.4
Total	29.0	75.7	29.0	75.7	258.7	816.1

* From FY96 when task budgeting was in effect.

Mission Data

Stage of Project Cycle	Date (month/year)	No. of persons	Staff days in field	Specializations represented	Performance rating		Types of problems
					Implem. Status	Development Objectives	
Through Appraisal	02/88	3	2	AG, 2 HY			
	09/88	1	6	AG			
	12/88	2	14	AG, RE	-	-	-
	02/89	4	18	AG, CS, EC, RE			
Appraisal Through Board	05/89	3	14	AG, CS, RE			
	09/89	2	3	AG, ES	-	-	-
Board Approval through Effectiveness					-	-	-
Supervision	09/90	4		AG, CP, IE, RE	2	1	
	02/91	3		AG, IE, RE	3	2	
	07/91	1		AG	2	2	
	10/91	4		AG, CP, FA, RE	2	2	
	04/92	3		AG, EC, RE	2	2	
	11/92	5		AG, EC, FA, IE, RE	3	2	
	07/93	4		AG, 2 EC, EN	2	2	
	02/94	4		AG, CS, EC, EN	U	S	
	02/95	5		AG, EC, EN, RE	HU	HU	
	07/95	4		DC, 2 EC, IE, RE	U	HU	
	12/95	3		CE, CS, IE, RE	U	U	
	05/96	5		CE, EC, RE	S	S	
	01/97	3	10	CE, EC, IE, RE, PA	S	S	
	06/97	4	4	CE, EC, RE	S	S	
	12/97	3	6	CE, EC, IE, RE	S	S	
				CE, EC, PA			
Completion	8/98	3		CE, EC, IE	S	S	-

AG= Agriculture, CE= CMI Engineer, CP= Coffee Processing Specialist, CS= Credit Specialist, DC= Division Chief, EC= Economist, EN= Engineer, ES= Environment Specialist, FA= Financial Analyst, HY= Hydrologist, IE= Irrigation Engineer, PA= Program Assistant, RE= Rural Engineer

LAOS—PROVINCIAL GRID INTEGRATION PROJECT (C2425)

Key Project Data (See Table 1 for Performance Indicators)

	<i>Appraisal estimate</i>	<i>Latest or current estimate</i>	<i>Actual as % of appraisal estimate</i>
Total project costs (US\$ million)	49.3	47.5	96
Loan amount (US\$ million)	36.0	36.0	100
Cancellation (US\$ million)	-	-	
Date physical components completed: 06/30/99			

Project Dates

<i>Steps in project cycle</i>	<i>Planned</i>	<i>Actual</i>
Identification	N/A	1/8/91
Appraisal mission	8/91	11/12/91
Negotiation	5/92	7/29/92
Board Presentation		
Loan Signature	9/92	12/23/92
Loan Effectiveness	11/92	7/6/93
Project Completion	12/97	6/30/99
Loan closing	6/30/99	6/30/99

Cumulative Estimated and Actual Disbursements (US\$ million)

	<i>FY93</i>	<i>FY94</i>	<i>FY95</i>	<i>FY96</i>	<i>FY97</i>	<i>FY98</i>	<i>FY99</i>	<i>FY00</i>
Appraisal estimate	0.60	2.74	7.5	13.9	19.4	23.4	25.3	25.3
Actual	0.0	0.9	6.4	8.6	18.8	22.0	24.2	24.5
Actual as % of Estimate	0.0	32.8	85.3	61.9	96.9	94.0	95.6	96.8
Date of final disbursement	November 19, 1999							

Staff Inputs

<i>Stage of project cycle</i>	<i>Actual Weeks</i>
Through appraisal	56.3
Appraisal Board	29.0
Supervision	227.2
ICR	26.2
Total	387.2

Mission Data

Stage of project cycle	Month /year	No. of Persons	Days in Field	Specialized Staff Skills	Performance ratings ^b		Type of Problems
					Implement. Status	Develop. Objectives	
Through Appraisal	11/90g		7	FA	n/a	n/a	EdL's tariff proposal is still insufficient to meet EdL's long run needs. EdL needs to recruit and employ a qualified full time accountant.
	8/91		10	FA,	n/a	n/a	Pricing of electricity for domestic consumption is too low and excessive level of losses within EdL's distribution
Appraisal	11/91		8	FA, PE, EC, OF	n/a	n/a	A loss reduction program continues to be needed not only for Vientiane but also for other provinces; and EdL's tariffs need to be adjusted.
Post-Appraisal	03/92	1	5	FA	n/a	n/a	Ensure compliance with conditions of negotiations
Supervision	8/93	1	5	FA	HS	HS	EdL is still short of capable accounting staff.
Supervision	4/94	1	5	PE	S	S	Procurement action has been slow. Government consumers are still on average 5 months behind in payment.
Supervision	6/94	1	3	OF	n/a	n/a	
Supervision	7/95	1	5	OF	n/a	n/a	
Supervision	12/95	2	9	PE, OF	S	S	EdL needs to raise domestic tariff to improve their finances. Implementation of TA component is unsatisfactory.
Supervision	4/96	3	11	PE, FA, EC	n/a	n/a	EdL's financial statements do not conform to generally IAS; EdL needs to have an agreed strategy to increase domestic rates to cover full costs.
Supervision	6/96	1	7	OF	n/a	n/a	Loss Reduction Program (LRP) is moving slowly.
Supervision	2/97	4	14	PE, OF, FA	S	S	Implementation of the LRP needs to be accelerated; EdL's financial position is not meeting expectations and financial restructuring is necessary.
Supervision	4/97	2	3	FA, EC	n/a	n/a	EdL has not met the 20% self-financing ratio and in 1996, it was unable to meet its debt service obligations. Mission recommended several actions for improving EDL's financial in preparation of the SPRE project.
Supervision	7/97	3	9	EC, PE, FA	n/a	n/a	Additional tariff increases are required to ensure compliance with covenants. Program to reduce Government arrears has not been implemented.
Supervision	01/98	1	7	FA	S	S	Project implementation is nearing completion
Supervision	5/98	1	6	EC	n/a	n/a	Closing date was extended by one year to June 30, 1999.
Supervision	9/98	3	8	EC, FA	S	S	EdL's financial situation is very critical and continues deteriorating. EdL will likely be in default of IDA's covenants in FY98. A financial restructuring plan should be put in place.
Supervision	2/99	3	5	EC, FA	S	S	Devaluation of the kip has caused EdL to incur record net losses. GOL approved a 100% tariff increase, but further increases are needed to meet IDA's financial

Stage of project cycle	Month /year	No. of Persons	Days in Field	Specialized Staff Skills	Performance ratings ^b		Type of Problems
					Implement. Status	Develop. Objectives	
Supervision	5/99	1	2.5	EC	S	U	covenants. The continued macroeconomic instability has become a serious threat to the project's development objectives. The GOL has been unable to implement, with the exception of tariff increases, any of the financial restructuring measures proposed by EdL and MIH
Completion	11/99	2	5	EC, OA	S	U	The uncertainty associated to EdL's current financial status and the country's macroeconomic conditions, casts an unsatisfactory rating in the sustainability of the project's achievements.

Note: All supervision missions conducted after May/98 were conducted in combination with missions for other power projects, therefore, the days spent in the fields for some missions are estimates.

Specialized Skills: FA=Financial Analyst; PE=Power Engineer; EC=Economist; OF=Operations Officer; OA=Operations Analyst

Performance Ratings: IP=Implementation Progress; DO=Development Objectives; HS=Highly Satisfactory; S=Satisfactory

Other Project Data

FOLLOW-ON OPERATIONS			
Operation	Credit no.	Amount (US\$ million)	Board date
Southern Provinces Rural Electrification	C3047	NA	FY1998

LAO PDR: FOREST MANAGEMENT & CONSERVATION PROJECT (CREDIT 2586-LA)

Key Project Data (amounts in US\$ million)

	Appraisal estimate	Actual or current estimate	Actual as % of appraisal estimate
Total project costs	20.2	12.9	64
Loan amount	8.7	2.5	29
Cofinancing	11.5	10.4	90
Cancellation	US\$6.2 million		
Date physical components completed	November 30, 2000		

Cumulative Estimated and Actual Disbursements (Not Available)

	FY91	FY92	FY93	FY94	FY95	FY96	FY97	FY98	FY99
Appraisal estimate (US\$M)									
Actual (US\$M)									
Actual as % of appraisal									
Date of final disbursement:									

Project Dates

	Original/Date Planned	Actual/Latest Estimate
Identification	NA	July 28, 1990
Appraisal	NA	November 8, 1991
Approval	NA	March 25, 1994
Effectiveness	September 27, 1994	January 10, 1995
Mid-term Review	April 30, 1998	April 27, 1998
Closing date	September 30, 2000	November 30, 2000

NA Not available.

Staff Inputs/Bank Resources (staff weeks/ US\$'000)

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff Weeks	US\$'000
Identification/Preparation	158	178.6
Appraisal/Negotiation	66	176.4
Supervision	82	209.0
ICR	10	85.2
Total	316	649.2

Mission Data

Stage of Project Cycle	Date (month/year)	No. of persons and Specialty (e.g. 2 Economists, 1FMs, etc.)		Performance rating	
		Count	Specialty	Implem. Progress	Development Objectives
Identification/Preparation	5/1991				
Appraisal/Negotiation	9/91				
	2/93				
Supervision	9/93	4	Ecologist, Forester	HS	HS
	10/94	3	Ecologist, Forester, Agriculturist	S	S
	3/95	2	Ecologist, Forester	S	S
	6/95	3	Ecologist, Private Sector Development Specialist, Anthropologist	S	S
	11/95	3	Ecologist, Forester, Environment Spec.	S	S
	4/96	4	Ecologist, Forester, Environment Spec.	S	S
	11/96	4	Ecologist, Forester, Environment Spec. Anthropologist	S	S
	6/97	5	Ecologist, Forester, Environment Spec. Anthropologist	S	S
	11/97	4	Ecologist, Forester, Community Forestry Spec., Anthropologist, Private Sector Development Specialist	S	S
	6/98	5	Ecologist, Anthropologist, Environment Spec., Biodiversity Specialist Anthropologist	S	S
	12/98				
	5/99	6	Ecologist, Anthropologist, Environment Specialist, Private Sector Development Specialist, Forester	S	S
	12/99	3		U	U
	2/00	3		U	U
		4	Ecologist, Community Forestry Spec., Forester, Biodiversity Specialist Senior Program Officer, Procurement Specialist Economist, Forester Economist, Forester		
ICR	11/00	4	Forester, Community Forestry Spec., Economist, Biodiversity Specialist	U	U