

ASIAN DEVELOPMENT BANK

PCR: LAO 23047

PROJECT COMPLETION REPORT

ON THE

**EDUCATION QUALITY IMPROVEMENT PROJECT
(Loan 1103-LAO[SF])**

IN THE

LAO PEOPLE'S DEMOCRATIC REPUBLIC

June 2000

CURRENCY EQUIVALENTS

Currency Unit – Kip (KN)

		At Appraisal (31 August 1991)	At Project Completion (3 December 1999)
KN1.00	=	\$0.0015	\$0.00013
\$1.00	=	KN 700	KN 7,700

ABBREVIATIONS

ADB	-	Asian Development Bank
BME	-	Benefit Monitoring and Evaluation
EA	-	executing agency
ECS	-	Education Construction Service
EDP	-	Education Development Project
EQIP	-	Education Quality Improvement Project
IMU	-	Instructional Materials Unit
IUP	-	Institute of Pedagogy
Lao PDR	-	Lao People's Democratic Republic
MOE	-	Ministry of Education
MOF	-	Ministry of Finance
NTEAB	-	National Teacher Education Advisory Board
NUOL	-	National University of Lao
O&M	-	operation and maintenance
PCD	-	Planning and Cooperation Department
PCU	-	Project Coordination Unit
PIU	-	project implementation unit
PUCDA	-	Provincial Unit for Construction Development Assistance
TA	-	technical assistance
TDC	-	Teacher Development Center
TTC	-	teacher training college
TTD	-	Teacher Training Department
UPE	-	universal primary education

NOTES

- (i) The fiscal year (FY) of the Government ends on 30 September.
- (ii) In this report, "\$" refers to US dollars.

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BASIC DATA**A. Loan Identification**

1.	Country	the Lao People's Democratic Republic
2.	Loan Number	1103-LAO(SF)
3.	Project Title	Education Quality Improvement Project
4.	Borrower	the Lao People's Democratic Republic
5.	Executing Agency	Ministry of Education and Sports, renamed Ministry of Education in 1993
6.	Amount of Loan	\$13.3 million (SDR 9,947,000)
7.	PCR Number	PCR:LAO 579

B. Loan Data

1.	Appraisal	
	- Date Started	30 May 1991
	- Date Completed	14 June 1991
2.	Loan Negotiations	
	- Date Started	18 August 1991
	- Date Completed	20 August 1991
3.	Date of Board Approval	26 September 1991
4.	Date of Loan Agreement	13 December 1991
5.	Date of Loan Effectiveness	
	- in Loan Agreement	12 March 1992
	- Actual	12 March 1992
	- Number of Extensions	none
6.	Closing Date	
	- in Loan Agreement	30 June 1998
	- Actual	31 December 1998
	- Number of Extensions	1
7.	Terms of Loan	
	Service Charge	
	- Interest Rate	1 percent per annum
	- Maturity (number of years)	40
	- Grace Period (number of years)	10
8.	Disbursements	

a. Dates

Initial Disbursement
22 November 1993

Final Disbursement
03 December 1999¹

Time Interval
6.1 years

Effective Date
12 March 1992

Original Closing Date
30 June 1998

Time Interval
6.3 years

¹ Final Disbursement was delayed due to the late refund of the unutilized Imprest Account.

b. Amount

Category or Subloan	Original Allocation	Last Revised Allocation	Amount Added/ (Cancelled)	Net Amount Available	Amount Disbursed
Civil Works	4,649,097	8,810,534	43,147	8,853,681	8,853,681
Vehicles & Equipment	788,889	956,981	(225,485)	731,496	731,496
Equipment, Paper and Ink, Instructional Materials	1,989,605	664,730	49,114	713,844	713,844
Distribution of Instructional Materials	441,243	23,877	(23,877)	0	0
Furniture	480,019	1,068,725	(38,224)	1,030,501	1,030,501
Staff Development	171,149	143,261	(15,372)	127,889	127,889
Foreign Fellowships					
Staff Development	1,379,887	657,090	(52,089)	605,001	605,001
Books/Training Materials					
Domestic Consulting Services	1,089,737	330,455	(143,189)	187,266	187,266
Project Implementation	450,603	157,587	(24,358)	133,229	133,229
Service Charge – Construction	459,962	456,510	(233,936)	222,574	222,574
Unallocated	1,399,944	30,385	(30,385)	0	0
Total	13,300,135	13,300,135	(694,654)	12,605,481	12,605,481

9. Local Costs (ADB Financed)

- Amount (\$ million)	4.38
- Percentage of Local Costs	63
- Percentage of Total Cost	26

C. Project Data

1. Project Cost (\$ million)

	Appraisal Estimate	Actual
Foreign Exchange Cost	9.400	10.093
Local Currency Cost	9.000	6.995
Total Cost	18.400	17.088

2. Financing Plan

	Appraisal Estimate			Actual		
	Foreign	Local	Total	Foreign	Local	Total
Implementation Costs						
Borrower Financed	0.000	3.100	3.100	0.000	2.616	2.616
ADB Financed	7.400	5.900	13.300	8.226	4.379	12.605
Government of Norway	2.000	0.000	2.000	1.867	0.000	1.867
Total	9.400	9.000	18.400	10.093	6.995	17.088

3. Cost Breakdown by Project Components

Component	Appraisal Estimate			Actual		Total
	Foreign	Local	Total	Foreign	Local	
Civil Works						
Site Development	200	370	570	0	7	7
Rehabilitation	340	400	740	701	378	1079
New Construction	3030	2480	5510	5044	4322	9366
Furniture	370	310	680	687	351	1038
Equipment & Vehicles	900	70	970	730	1	731
Consulting Services	1830	1090	2920	1596	187	1783
Staff Development	470	1310	1780	399	605	1004
Instructional Materials	1800	1570	3370	714	0	714
Project Implementation & Recurrent Cost	0	940	940	0	594	594
Taxes and Duties	0	460	460	0	550	550
Service Charge	460	0	460	222	0	222
Total	9400	9000	18400	10093	6995	17088

4. Project Schedule

Item	Appraisal Estimate	Actual
Civil Works		
Date of Award	I Quarter 1993	II Quarter 1995
Completion of Work	II Quarter 1997	IV Quarter 1998
Equipment		
First Delivery	IV Qtr. 1993	I Quarter 1997
Last Delivery	III Qtr. 1997	IV Quarter 1998

D. Data on Bank Missions

Name of Mission	Dates	No. of Persons	No. of Person-days	Specialization of Members ^{a/}
Appraisal Mission	30 May – 14 Jun 1991	5	75	b, d, e, f, g
Inception Mission	19 – 26 Nov 1991	1	8	d
Review – 1	30 Mar – 4 Apr 1992	1	6	b
Review – 2	9 – 13 Nov 1992	2	10	b, h
Review – 3	14 – 28 Jun 1993	1	15	b
Review – 4	8 – 18 Feb 1994	2	22	a, b
Review – 5	6 – 15 June 1995	1	10	b
Review – 6	23 – 30 Oct 1995	3	24	b
Review – 7	14 – 18 Oct 1996	1	5	b
Review -- 8	28 Apr – 3 May 1997	1	6	b
Review -- 9	23 – 27 Feb 1998	1	5	d
Review – 10	28 Sep – 6 Oct 1998	2	18	c, h
Project Completion	21 Jan – 4 Feb 2000	2	28	d, h
Total		23	232	

^a a – manager, b – education specialist, c – senior project specialist, d – project specialist, e – counsel, f – programs officer, g – teacher/education consultant, h – assistant project analyst

This report was prepared by a Bank Mission comprising Nurul Huda (Project Specialist/Mission Leader) and Ma. Rosario A. Romasanta (Assistant Project Analyst), who visited the Lao People's Democratic Republic in January - February 2000.

E. Related Loans

Loan	Project Title	Date of Approval	Amount (\$million)
1. For the same executing agency			
1374-LAO(SF)	Postsecondary Education Sector	19 Sep 1995	20.000
1621-LAO(SF)	Basic Education (Girls)	25 Jun 1998	20.000
2. For other Executing Agencies in Other Sector			
Ministry of Public Health			
1348-LAO(SF)	Primary Health Care	19 Jan 1995	5.000



I. PROJECT DESCRIPTION

1. Recognizing that the development of human resources is a key factor in sustained economic growth and social development, the Government of the Lao People's Democratic Republic (Lao PDR) is committed to the goal of universal primary education (UPE).¹ As part of UPE, in addition to increased enrollment and retention, the Government gives particular importance to the quality of education.² The strengthening of primary and lower secondary schooling, together with improvements in the teacher education system, were the first steps that the Government needed to take without delay to achieve this goal. The Government's public investment program accords high priority to quality improvement in education to meet the shortage of skilled manpower and qualified managers in the country.

2. The Education Quality Improvement Project (EQIP) was formulated under a project preparatory technical assistance (TA)³, from the Asian Development Bank (ADB) with the main objective of improving the quality of primary and lower secondary education. More specifically, the objective was to help the Government to (i) improve training programs for teachers and educational administrators, in-service courses for teachers and teacher trainers, and instructional materials for the new training programs; and (ii) upgrade teacher training buildings and facilities.⁴ The project scope was appropriate to the education sector needs for quality improvement. The Project was prepared in close coordination with the World Bank's Education Development Project (EDP), which was under preparation at the same time and focused mainly on curriculum revision and in-service training of teachers of primary and lower secondary schools. The two projects complemented each other.⁵

3. The original scope of the Project comprised two main components: Part A, development of teacher education system, and Part B, production and distribution of instructional materials for primary and lower secondary schools and teacher training colleges (TTCs). Subsequently, a subcomponent of Part A on training of school principals and a subcomponent of Part B on the production and distribution of instructional materials for primary and secondary schools were, by agreement between the Ministry of Education (MOE), World Bank, and ADB, transferred to EDP.⁶ This change in scope did not affect the Project's original objectives and its focus on the improvement in quality of education. The amended scope of work under the two main components were as follows: Part A—reforms in teacher training through policy development by the establishment of the National Teacher Education Advisory Board (NTEAB), curriculum and training reforms through the establishment of the Teacher Development Center (TDC), upgrading of physical facilities, and in-service training of teacher trainers and educational administrators; and Part B—the development, production, and distribution of textbooks, instructional materials, and teachers guides for TTCs.

¹ The Government's original target for UPE was by the year 2000, subsequently moved to 2012.

² Even though enrollment and number of teachers employed has increased substantially since 1985, when the country started to move from a centrally planned system to a market oriented economy, the expansion has not been accompanied by improvements in the quality of schooling or of teacher education.

³ TA 1289-LAO: *Preparation of an Education Project*, for \$300,000, financed by the French Technical Assistance Grant Fund, approved on 11 April 1990.

⁴ TA 1130-LAO: *Education Sector Study*, for \$380,000, approved on 14 February 1989, identified these issues and provided the background and rationale for undertaking this Project.

⁵ EQIP, Appraisal Report, paras. 115-121, pages 32-33 discuss these linkages between the two projects.

⁶ At the request of the Government, ADB approved on 28 February 1997 this transfer and the change in project scope.

4. Other activities included procurement of furniture, equipment, and vehicles; establishment of laboratories and libraries; staff development fellowships; strengthening of the administrative capability of educational administrators at the national, provincial, and district level; and consulting services.

5. In addition to the project loan, a TA grant of \$500,000 was approved by ADB (TA 1569-LAO) for institutional strengthening of MOE⁷ in organization and management, the administration of teacher education systems, and higher education planning, including benefit monitoring and evaluation (BME) studies. Another TA grant (TA 1570-LAO) of \$2 million, funded by the Government of Norway and executed by ADB, was provided for academic consulting services, assistance to related implementation matters, and staff development.

II. EVALUATION OF IMPLEMENTATION

A. Project Components

1. National Teacher Education Advisory Board

6. The NTEAB was established as a key policy-making arm of MOE to provide advice to MOE on teacher education and the monitoring of policy implementation.⁸ In particular, NTEAB advised MOE on policies and priorities for teacher education development and conditions of employment. It made recommendations for teacher registration on the basis of qualifications. NTEAB considered and adopted a policy for teacher education, including an action plan for curriculum development and implementation of the new curriculum in the TTCs for the three systems of teacher training. These three systems are: 8 years of schooling and 3 years of teacher training (8+3), and 11 years of schooling and 1 year of teacher training (11+1), to become primary school teachers; and 11 years of schooling and 3 years of teacher education (11+3) to become lower secondary school teachers. This was an important initial restructuring of teacher education systems introduced and effectively coordinated by NTEAB. Based on NTEAB's recommendations, the Government has recently considered discontinuing the 8+3 system and is currently pursuing the adoption of only 11+1 teacher training system in all TTCs (except that the new curriculum for ethnic minority groups will continue to use the 8+3 system) as a measure to improve the capabilities of primary school teachers in line with the new curriculum of teacher education. Other important steps taken by NTEAB included the gradual phasing out of some low-performing TTCs, and relocations, and mergers of economically less viable TTCs for more effective operation.⁹ Through NTEAB's close monitoring, the overall management of TTCs has improved, and coordination of teacher training programs under MOE has been strengthened. NTEAB has successfully guided the adoption of enhanced qualifications for TTC graduates and coordinated implementation of the new curriculum.

⁷ At the time when the TA was approved, it was called the Ministry of Education and Sports (MOES), renamed MOE following a reorganization of the ministry in April 1993.

⁸ NTEAB, consisting of a president (the vice minister of MOE) and 16 members, is assisted by a secretariat in its operational responsibility.

⁹ EOIP, Appraisal Report, para. 30, page 9: In 1989-1990, there were 41 primary TTCs, 17 lower secondary TTCs, one upper secondary TTC, and four specialized lower secondary TTCs, one each for monks, physical education, fine arts and vocational education. By 1996, as part of the Government's phasing out plan, the total number of 63 TTCs was reduced to 10, including eight TTCs for general education and one each for physical education and fine arts.

2. Teacher Development Center

7. TDC was established with the main task of planning and coordinating the development of curriculum, textbooks, instructional materials, and teachers guides for TTCs as well as to organize short-term training for teachers and educational administrators at various levels. As envisaged in the Project, TDC has four operational units: curriculum development, instructional materials development, in-service training, and human resource development. TDC has adequate staff including a director, one head, and one deputy head for each unit. The TDC staff contingent has highly diverse academic and teaching backgrounds. To provide an appropriate facility for TDC, the Project supported the construction of a new building with excellent training facilities and equipment, including a conference room and specially designed rooms for video and other multimedia productions. TDC, which is at the campus of the former Institute of Pedagogy (IUP, now called the National University of Laos [NUOL]),¹⁰ has become a key institute for in-service training and research and development work related to curriculum development and other factors contributing to quality teaching.

8. To help TDC effectively carrying out its work, the Project provided consulting services to help establish TDC's four units and build staff capacity in computer skills; program management functions; English language fluency; curriculum design; development of course outlines; writing of texts; production of videos; and development, presentation, and evaluation of training programs. The consultants and TDC counterpart staff approached capacity building in a variety of interactive ways. Lectures and workshops were organized for staff to explain and demonstrate how to conduct participatory training and interactive learning, implement desk-top publishing and video production, collect information on educational needs, and develop curriculum and design courses for teachers' training. The TDC staff were also provided foreign training in curriculum development, instructional materials, and in teacher education systems.

9. The curriculum development for the TTCs was the most important activity in the teacher education reforms planned under the Project. The curriculum development followed a participatory approach involving various stakeholders. The TDC counterparts and consultants first developed the course outlines for the three teacher training systems (8+3, 11+1, and 11+3). A total of 159 course outlines were prepared, covering mathematics, science, language, social science, professional education, and other specialized programs of study. As part of this process, TDC organized workshops for selected staff of the TTCs to review the draft of the new curriculum and related course outlines. Input from the TTC instructors was an essential step in the process of curriculum development and this enhanced both the quality and relevance of curricular materials. With this information and inputs through consultative process, the curriculum frameworks were revised and new curriculum and course outlines were approved by MOE in May 1995. The new curriculum is more relevant to market needs and life skills, and has incorporated important elements of local culture and values. This participatory approach to curriculum development yielded three important benefits. It ensured greater validity and effectiveness of the curriculum, made the process of training easier and more efficient because the materials were seen to be relevant to classroom conditions, and helped foster linkages between educational institutions.

10. TDC played a major role in the teacher education reforms by effectively coordinating consultants' work and stakeholders' inputs, enabling the successful completion of curriculum

¹⁰ As part of preparation for ADB Loan 1374-LAO: *Postsecondary Education Rationalization Project*, for \$20 million, approved in September 1995, IUP was reorganized to become part of NUOL under the Government's program of rationalization of postsecondary education.

development and related tasks, including the training of the TTC teachers as envisaged at appraisal. However, after the Project's completion, the momentum of TDC's activities suffered in the first year due to lack of adequate funds from the Government's recurrent budget. This problem of the operation and maintenance (O&M) budget was caused by a delay in processing a proposal for the transfer of TDC activities to the Government's revenue budget. MOE has made some interim arrangement of funds by adjustments within its available recurrent budget allocations, and initiated regular allocation under the revenue budget from the next fiscal year beginning in October 2000 to adequately meet O&M requirements in future.

11. TDC is currently under the dual management of NUOL and the Teacher Training Department (TTD) of MOE. This originated during project implementation when TDC needed to work closely with NUOL, sharing facilities and some tasks. Since TDC is also required to prepare curriculum, textbooks, and instructional materials for TTCs, which are administered through TTD, the dual management affects TDC's work. An early decision is needed on its management under one organization, for reasons of accountability and direction. MOE is reviewing this matter and will inform ADB of a final decision, expected to be taken by 30 June 2000.

3. Upgrading of Physical Facilities

12. Civil works constituted a major activity of the Project, which originally included a provision for new construction and upgrading of physical facilities at 10 TTCs¹¹. This was subsequently reduced to 8 TTCs, by phasing out Sayaburi TTC on 1 September 1994 and Phongsali on 1 September 1996, as part of the Government's rationalization policy of merging some TTCs to make them economically viable and close others with very low enrollment levels. The 8 reorganized and renamed TTCs include 5 combined primary and lower secondary school TTCs (Luang Prabang, Savannakhet, Champassak, Ban Kheun, and Khangkai Village [Xiang Khouang province], and 3 primary school TTCs (Dongkham Xang Village [formerly Vientiane Prefecture], Luang Namtha, and Saravane). Some TTCs were relocated to provide closer access to ethnic minority groups and poor communities. In addition to the 8 TTCs and TDC, the civil works included some construction of classroom buildings and dormitories at the IUP.

13. The physical facilities generally involved construction or renovation of administrative buildings, classrooms, hostels, staff housing, auditoriums, libraries, workshops, laboratories, kitchens, and toilets. The individual package of improved facilities provided by the Project varied between TTCs. Since the indicative list of civil works and estimates at appraisal was based on preliminary information, the civil work requirements were reviewed and reprioritized during implementation based on actual needs and available loan funds. This was necessitated by a substantial increase in the cost of construction materials resulting from a delay in starting the civil works and a severe depreciation of the local currency following the Asian financial crisis in mid-1997. The overall implementation of reprioritized civil works was in conformity with the appraisal list of civil works and these fully met the Project's objectives of facilities improvement (Appendix I). Some small civil works of selected facilities of IUP (NUOL) were transferred to the related ADB Loan 1374-LAO (SF), which is executed by MOE and includes a large component of civil works for NUOL.

14. The construction of civil works was delayed by about three years from the appraisal schedule. The main reasons for the initial delay were understaffing and the limited technical

¹¹ Combined primary and lower secondary TTCs at Luang Prabang, Savannakhet, Champassak, Xiang Khouang and Ban Kheun, and the primary TTCs at Vientiane Prefecture, Luang Namtha, Sayaburi, Saravane and Phongsali.

capacity of the Education Construction Services (ECS), which was the engineering unit of MOE and was responsible for the construction. Although construction was delegated to the newly created Provincial Unit for Construction Development Assistance (PUCDA) in 1997, PUCDA also could not efficiently handle the work because of its limited technical staff and facilities. The inadequate skills of local contractors, problems in delivering construction materials to remote sites, and a construction season limited by rains added to the delay (Appendix 2).

15. The construction and the furniture supplied to the TTCs are generally of good standard. New or upgraded facilities — including classrooms, offices, meeting rooms, laboratories, and libraries — provide a good environment for teacher education. However, the supply of water is still a problem in some TTCs and insufficient recurrent budget is a common problem affecting TTCs' routine maintenance of facilities as well as payment of bills for water and electricity. MOE is taking action to rectify the water problem and is committed to providing adequate budgetary allocations for the O&M of project facilities.

4. In-Country Training

16. The Project supported extensive in-country training to promote a new philosophy of pedagogy among educational administrators and faculty at the TTCs, and teach educational administrators new approaches to management and leadership. The loan provided some funds for the in-country training program, particularly fellowships for short training courses and orientation, but the major share of financing came from a grant under TA 1570. The training courses were developed by TDC with the help of international consultants. A total of 780 participants, against the appraisal target of 408, attended the training courses conducted by TDC and TTD. In addition, 64 local workshops were conducted for 2,778 TTC staff, and provincial and district level education administrators. These workshops dealt with the new curriculum, new teaching methods, budgeting and financial management, maintenance of buildings and equipment, leadership, and motivation of staff. At the workshops focusing on the new curriculum, participants practiced training techniques based on the new pedagogy. TDC acquired the necessary capacity to continue to organize such workshops even after the international consultants had finished their work on the Project.

5. Foreign Training

17. Fellowships for foreign training were provided to stimulate new ways of thinking about teaching, curriculum development, and educational administration. A total of 400 teachers and educational administrators were trained in five countries in the region: 25 received fellowships financed from loan funds and 29 fellowships were grant funded under TA 1570. Including these 29 fellowships, 375 fellowships for short-term training and study tours were financed under the TA for a total of 231 person-months. Although there was some delay in organizing this large package of foreign training in 31 batches, the program was successfully completed, greatly contributing to staff development through gains in knowledge and experience. The benefits to institutional capacity building from this training have started to emerge in the implementation of the new curriculum, improved teaching and learning practice, and educational management.

6. Production and Distribution of Instructional Materials

18. The Project provided for the development, production, and distribution of teachers guides, textbooks, and instructional materials for TTCs. The textbooks and teachers guides were prepared in stages for courses in the new curriculum with the help of consultants following a participatory process. In the first year (1994-95), the experienced teachers were involved in

preparing teaching materials and textbooks for the academic year 1995-1996. A new method was used in the second and third years. Individually written textbooks and teachers guides were tested in classrooms for one semester. After this, they were revised and edited in workshops before finalization. A total of 140 textbooks, 78 teachers guides and 60 kinds of instructional materials were successfully produced, well above appraisal targets.

19. The new textbooks and teachers guides are concise and conform to the new curriculum, with good use of illustrations. However, there were some problems at the preparation stage concerning shortages of copies of drafts of instructional materials, textbooks, and teachers guides. The development of instructional materials was also behind schedule due to the limited experience of Lao specialists whose training was not completed on time. As a result, the final printing of these teaching materials was delayed by about a year. Despite this delay, the instructional materials and teachers guides have substantially improved opportunities for TTC teachers for self-study and increased the use of instructional materials.

20. The Project supported TDC in the development of an impressive library and video collection. TDC has produced 84 training video films, translated 17 video films into the Lao language, and made 120 copies of these videos. The videos focus on exemplary teaching methods that demonstrate the effectiveness of the new pedagogy. The videos are in high demand in the TTCs. With the video equipment provided by the Project, TDC has developed institutional capability to produce original videos for training needs.

B. Implementation Arrangements

21. When the loan was approved in 1991, the Ministry of Education and Sports (MOES) was the executing agency (EA) for the Project, responsible for overall planning, organization, and implementation. Subsequently, following a reorganization in April 1993, MOES was renamed the Ministry of Education (MOE). A project implementation unit (PIU) was established, headed by a project director responsible to the first vice-minister of the MOE for the purpose of implementing the Project. The project director was responsible for the overall implementation of the Project. In addition, a project coordinator was appointed to oversee its day-to-day implementation. The PIU was structured in a flexible format to allow future projects to use its services. Based on this flexibility, after the approval of the World Bank's EDP, which was complementary to the ADB's Project, MOE decided to use the PIU to implement both these projects. However, the two projects had their own separate project coordinators (Appendix 3).

22. Although it was not required by the loan covenant, MOE constituted a steering committee to coordinate the implementation of all aided projects, and set up working groups and implementation units comprising representatives of concerned departments and offices. At a later stage of project implementation, a project coordination unit (PCU) was established to coordinate the activities of all PIUs under the MOE's planning and cooperation department (PCD). Except for the changes in the EA's name and the responsibilities of the PIU, the implementation arrangements were in line with those agreed to during the appraisal.

23. The PIU was responsible for procurement, financial management, coordination with other Government agencies, recruitment of consultants, award of fellowships, reporting to ADB, and monitoring project implementation. The project director was assisted by the full-time project coordinator, and two accountants and one administrative assistant. Consultant services were provided to help the PIU build capacity in project management and implementation under two grant-financed TAs (TAs 1569 and 1570). The project director remained in position until about six months before the loan closing. A second project director was immediately appointed. The

project coordinator stayed until completion of the Project. The continuity in the leadership of the PIU and consultant support greatly helped improve project implementation after initial difficulties due to lack of experience. The PCU, working groups and implementation units all helped to speed up project implementation.

24. The selection of TTCs for facilities improvement was based on criteria agreed at appraisal. Particular attention was paid to (i) the accessibility of TTC to student teachers from neighboring provinces, and (ii) combined primary and lower secondary TTCs that constitute regional teacher training centers. Three primary TTCs were suitably located to make them easily accessible to ethnic minorities.

25. Civil works under the Project were primarily executed by ECS and handed over to PUCDA, under MOE's policy to decentralizing construction work to the provincial level. However, ECS provided the designs and plans as well as monitoring services to oversee the quality of work. Equipment and instructional materials were procured by MOE's instructional and materials unit (IMU). Project funds were channeled through the Ministry of Finance (MOF), after processing by the PIU and MOE's department of finance, for payment to contractors.

C. Project Costs

26. At appraisal, the total cost of the Project was estimated at \$18.4 million equivalent (inclusive of taxes, duties, and physical and price contingencies). Of this, \$9.4 million, or 51 percent, was the foreign exchange cost (including \$0.46 million for service charges on the ADB loan during project implementation) and \$9.0 million equivalent, or 49 percent, the local currency cost. ADB approved a loan of \$13.3 million from its Special Funds resource to finance \$7.4 million in foreign exchange cost and \$5.9 million in local currency cost. The ADB loan represented 72.3 percent of the estimated total project cost. A grant of \$2.0 million from the Government of Norway financed the remaining foreign exchange cost (10.9 percent) of the total project cost. The remaining local currency cost of \$3.1 million (16.8 percent of the project cost) was to be made available by the Government through appropriate budgetary allocations (Appendix 4). During appraisal, ADB advised the Government that, if the grant financing the Government was seeking from other agencies for some activities covered under the Project became available, the corresponding portions would be canceled or reallocated from the ADB loan as and when grants become available.

27. On 31 December 1998, the revised loan closing date, the actual total cost of the Project amounted to \$17.1 million, 7.1 percent below the original project cost estimate. This reduction in actual total cost came about mainly on account of (i) TTCs were developed mainly at existing sites, and (ii) consulting services cost less than estimated. The ADB loan was reduced to \$12.6 million, including a reallocation of \$4.2 million resulting from (i) the transfer of printing and distribution of textbooks for primary and secondary schools to the World Bank's EDP; and (ii) financing of local consulting services and some fellowships from the Norwegian TA grant, to finance additional costs of civil works due to higher construction costs. This reallocation required a transfer of funds from local to foreign costs under the staff development and instructional materials components to meet ADB's financing share of the civil works cost. At the time of appraisal, the cost of civil works was based on preliminary information, and after detailed survey and design during implementation, the actual cost increased substantially. The unprecedented depreciation of the kip (following the Asian financial crisis of 1997), and the introduction of taxes on construction materials further increased the cost. Upon the Project's completion, the unutilized loan proceeds of \$0.7 million were canceled with the account closing on 3 December 1999.

D. Project Schedule

28. The Project was originally scheduled to commence in December 1991 and be implemented over a period of six years after loan effectiveness, with the loan closing on 30 June 1998. However, the loan closing had to be extended to 31 December 1998 due to delays in the start of the project and to allow for the completion of civil works.

29. The loan became effective on 12 March 1992, about five months after it was approved on 26 September 1991, due to delays in the establishment of the PIU and the appointment of the project director and the project coordinator. The selection of consultants took about a year and they began work only in early 1993. This delay affected the initial preparatory work by the PIU staff, who were unfamiliar with ADB procedures. The initial delay in the selection of sites for TTCs, and subsequent changes to more suitable locations in some cases required new soil surveys, drawings, and designs, which took more than a year. The cost estimates also needed revisions due to these changes, which delayed the preparation of bid documents and invitations of bids. As a result, the start of civil works was delayed by more than two years (Appendix 2).

30. The construction and renovation work proceeded slowly because of weak management and supervision by ECS of the 45 individual small contracts in remote areas. The delays in selection of construction supervision consultants, lack of skills of local contractors, and problems in carrying constructional materials to remote sites further hampered progress. The situation improved in 1997 and the work gathered momentum in 1998, the last year of project implementation.

31. The development and production of teachers guides, textbooks, and instructional materials was delayed due to the late selection of consultants, the participatory process involving the various stakeholders, and the testing of the materials before finalization. The procurement of laboratory equipment was also delayed because this was linked to the completion of the physical facilities.

E. Engagement of Consultants and Procurement of Goods and Services

1. Civil Works Consultants

32. Under the Project, ECS was responsible for the preparation of drawing and design planning as well as supervision. A delay in hiring an international civil works consultant to help ECS with architectural designs in turn delayed the design work. The selection of domestic consultants to oversee construction was delayed because of delay in the PIU's decision on whether to use loan funds or seek grants.

2. Procurement of Goods and Services

33. Civil works under the Project were of small value and located in scattered locations. The contracts were awarded on the basis of local competitive bidding (LCB) among qualified contractors. Vehicles, office and laboratory equipment, textbooks, and instructional materials were procured centrally through the IMU. These procurements were in small contracts, and were undertaken in accordance with the ADB *Guidelines on Procurement* following international shopping, LCB, or direct purchase procedures depending on the value of individual contract. The procurement of furniture was packaged under civil works contracts.

34. The PIU, TTD, and TDC arranged foreign and in-country training following ADB's procedures. There were some delays in the training schedule. No major problems were encountered in the procurement of goods except for the delay in the finalization of the specifications for the equipment and instructional materials. Unfamiliarity with ADB procedures was a common reason for delays in procurement. This problem of procedural difficulties was largely overcome through consultants' support and close guidance by ADB.

F. Performance of Consultants, Contractors, and Suppliers

35. The performance of civil works consultants was generally satisfactory, considering that they worked under extreme time pressure. The standardized architectural and structural designs and plans were generally satisfactory and conformed with the existing Government building codes. However, on-site adjustments had to be made to adapt the standardized designs to local conditions. Differences in terrain at the different TTC sites required design and specification adjustments. Some of the specified materials were replaced with more readily available materials for ease of maintenance. There was a problem in the design of some toilets. This should have been rectified by the contractors during the maintenance period. The concerned TTC authorities are taking actions to rectify these defects.

36. With the process of decentralization underway, PUCDA assumed the authority to award contracts under the overall supervision of ECS and more local contractors were able to bid for civil works. This helped to build capacity in the local construction industry. Initial delays were caused by lengthy negotiations with the few available contractors, with limited skills, unfamiliarity with ADB bidding procedures, and a lack of financial capabilities. Despite these problems, the contractors, under the supervision of local authorities, did a good job and all contracts were completed by the revised loan closing date. The quality of their work is considered satisfactory. The suppliers of equipment and instructional materials also performed satisfactorily.

G. Conditions and Covenants

37. The loan effectiveness was delayed by about five months due to the delay in the establishment of the PIU. The Government complied with most of the major loan covenants as shown in Appendix 5. There were difficulties in fully complying with some covenants requiring project implementation skills that were not available. Loan covenants 2 (c) and 2 (d) of schedule 6 could not be fully met due to the unavailability of domestic experts. A study on a strategy for cost recovery under TA 1570, conducted under loan covenant 10 of schedule 6, recognized the difficulty in developing administrative mechanisms to establish and institutionalize such a strategy in the context of realities and social justice considerations of the country. Loan covenant 23 (a) of schedule 6 on BME was complied with late due to the delayed start of project implementation. BME began in 1997 with a report on the first phase of the project. A report on the second phase was completed in March 1999. MOE is committed to updating BME studies on project activities to provide data for policy planning and the development of teacher education.

H. Disbursements

38. The total amount disbursed from the ADB loan was \$12.6 million, 94.8 percent of the approved loan amount of \$13.3 million. An unutilized amount of \$0.7 million was canceled at loan account closing. Loan disbursement remained very slow during the first three years due to slow project implementation (Appendix 6). Delays in funds flow were caused by difficulties in

preparing and processing requests for disbursements, which involved a lengthy repetitive process under the overall control of Ministry of Finance (MOF). This process was followed in all payments against expenditures under the Project's procurement and for submission of withdrawal applications to ADB. The PIU and MOE had no direct access to the imprest account and the petty cash allowed by MOF covered only routine requirements.

I. Environmental and Social Considerations

39. The Project has had no negative environmental impact. All project sites were at existing TTCs, so there was no environmental degradation from the civil works. The disposal of wastes and effluents was planned to minimize any adverse impact on the environment. The curriculum for TTCs and instructional materials were developed with a conscious effort to increase awareness of environmental issues. Curriculum workshops and teachers' training included education about environmental preservation. Increased enrollment of women and improved accessibility of TTCs to ethnic minority groups contributed to social development and equity.

J. Performance of the Borrower and the Executing Agency

40. The commencement of the Project was delayed primarily due to unfamiliarity with the procedures of ADB-funded projects. However, the Government and MOE showed a strong commitment to the Project throughout its implementation despite the shortage of qualified staff and other constraining factors. By providing additional support to the small PIU through a high-level steering committee, working groups and implementation units, MOE strengthened the overall implementation and coordination of the Project. This substantially improved the performance of the PIU. Despite the country's serious fiscal problems, particularly following the Asian financial crisis, which coincided with the peak time of project implementation, adequate counterpart funds were provided to complete the Project by the revised loan closing date. MOE cooperated fully with ADB's review missions and interacted closely with ADB for any clarifications needed on project implementation matters. Project progress reports and the maintenance of records of accounts, including the operation of the imprest account, were satisfactory.

41. MOE has overall responsibility for the O&M of TTCs. However, the budget allocation for routine maintenance is insufficient and TTCs cannot properly maintain their facilities. Although, the Government's overall budgetary position is difficult, MOE is committed to increasing its allocations for O&M.

K. Performance of ADB

42. ADB was closely involved at all stages of project implementation and monitoring. The PIU and MOE appreciated ADB's cooperation in expediting decisions and the approval of procurement matters. ADB provided general direction throughout the Project consistent with the educational priorities of the Government. It provided adequate funds for the execution of the Project and supported it with TA and consultant's services for training and capacity building in project implementation, curriculum development, the monitoring and evaluation of education systems, and the maintenance of buildings and facilities. ADB's approval of reallocation of funds to finance the additional costs for civil works was timely; without this some important civil works could not have been completed on time. This was commended by Government. MOE, in its project completion report, also appreciated ADB's agreement to extend the loan by six months, which allowed it to complete the civil works and supply all the instructional materials.

III. TECHNICAL ASSISTANCE

43. ADB approved two TAs: Institutional Strengthening of MOES (TA 1569) and Curriculum Development for Teacher Education (TA 1570). The TA agreements were signed on 23 October 1991 and 28 October 1991, respectively.

1. Institutional Strengthening of MOE

44. The TA objective was to strengthen the institutional capacity of MOE in (i) organization and management, (ii) the administration of teacher education systems, and (iii) higher education planning. The TA financed 18 person-months of international consultant services.

45. The major activities undertaken under the TA were (i) the development of administrative and financial systems to enable MOE to better implement the Project; (ii) orientation and training in management, planning, and relevant fields such as accountancy; (iii) the development of a planning system for the management of TTCs, and needs assessment and recommendations for training TTD staff; (iv) the development of an education system monitoring and evaluation methodology and training of staff in implementing an effective sectorwide BME system; and (v) advice on land requirements and site development, establishment of a maintenance and inventory system, and staff training. Although the consultants did not have suitable counterpart staff, the TA was satisfactorily implemented and greatly helped to meet capacity building needs for project management and implementation. The TA was successful in achieving its objectives. It helped to expedite project implementation at the initial stage when MOE faced difficulties.

2. Curriculum Development for Teacher Education

46. The TA objective was to assist MOE in the development of (i) an institution for teacher education; (ii) a progressive new nationwide pedagogy; (iii) a new teacher education curriculum and course outlines; (iv) related textbooks, teachers guides, and instructional materials; and (v) a training program for key educators at various levels. The TA also helped in the planning and design of construction works and in laying down the specifications of equipment and furniture procured under the Project.

47. The TA provided 111 person-months of consultant services and was funded by the Government of Norway and executed by ADB. The actual utilization of consultants was for a total of 122.5 person-months, with the additional 11.5 person-months needed for additional inputs by the team leader, in-service training and subject matter specialists, and civil work consultants. There were some delays in the selection of consultants because of MOE's disagreement with ADB's evaluation and ranking due to unfamiliarity with ADB's *Guidelines on the Use of Consultants*. Eventually, the disagreement was satisfactorily resolved. The major activities carried out under the TA have been discussed earlier in this report (paras. 8-9, 16-20). The TA has made many useful contributions to the development of teacher education systems, MOE capacity building, and staff development. The capacity building process faced some initial delays because of the limited availability of counterpart staff. These problems were overcome after a concept paper was prepared on the policy directions of teacher education and an action plan was drawn up, with a realistic schedule of activities for the stakeholders.

IV. EVALUATION OF INITIAL PERFORMANCE AND BENEFITS

48. A financial analysis was not done for this social sector project because the benefits are difficult to quantify.

49. Through the establishment of NTEAB and TDC, the Project has contributed to institutional strengthening essential for improving the teacher education system and the quality of education. These two institutions met the qualitative objectives of the Project by developing a national policy and an action plan for teacher education. They have been responsible for (i) restructuring the teacher education system by phasing out the ineffective TTCs; (ii) upgrading entry level qualifications for teacher training programs; and (iii) developing a new curriculum, instructional materials, and teachers guides for TTCs. As a result of this restructuring and reform initiated by the Project, overall resource allocations for TTC have been rationalized, the management and coordination of TTCs have been strengthened, and the quality of TTC students has improved so that TTCs can deliver better trained graduates for primary and secondary school teaching.

50. The Project has helped expand and strengthen the capacity of TTCs by providing the required physical facilities and educational equipment for laboratories and workshops. The relocation of some TTCs to more convenient sites has made them more accessible. Total enrollment in TTCs has, as a result, increased to 4,468 against the appraisal projection of 4,322 by 1999-2000, even though 2 of the 10 TTCs originally planned were dropped (Appendix 7). By locating three primary TTCs close to areas populated largely by ethnic minority groups, the Project has made teacher training more accessible to these communities. The enrollment of ethnic minority students increased from 25 percent in school year 1993/94 to about 30 percent in 1998/99. With the dormitory facilities provided by the Project, enrollment of women students went up from 41 percent in 1992 to 48 percent in 1999. Over 50 percent of TTC students are nominated by the provincial education authorities from poor communities and disadvantaged areas under the Government's student quota system. Enrollment in TTCs is expected to grow steadily over the next three years. These improvements in the teacher education system and the quality of teaching have helped to increase primary school enrollment in the country to 892,681 (54 percent boys, 46 percent girls) against the appraisal target of 720,000 (55 percent boys, 45 percent girls) (Appendix 8).

51. The new curriculum developed under the Project is more relevant to market needs and life skills, and has incorporated important elements of Lao culture and values. To enable the effective implementation of the new curriculum and improve the quality of teaching, more textbooks and instructional materials have been provided to TTCs than planned at the time of appraisal. The ratio of textbooks supplied under the Project is one per student against the appraisal provision of one for two students. Teachers have been adequately trained to teach the new curriculum, using new teaching methods and practices. The new instructional materials and teachers guides have substantially improved teachers' opportunities for self-study and increased their self-confidence. Some important educational indicators have started to reveal the positive impact of the Project on teacher education. For example, the number of teachers in 8 TTCs increased from 384 in 1996 to 465 in 1999. The teacher-student ratio improved from 5 in 1993 to 10 in 1999 and the overall dropout rate declined from 6 to 2 percent. The TTC teachers are now more qualified, with 54 percent having a bachelor's degree against 40 percent in 1992. With the new curriculum, the class load of the teachers also increased from an average of 9 hours per week in 1993 to 15 hours in 1999. Although the Project's overall impact on quality will permeate slowly through the system in about two years time, the new graduates who were partially trained in TTCs are already showing improvements in their teaching skills, with well prepared lesson plans, better classroom management, and an emphasis on problem solving. Since the new curriculum and teaching methods were introduced only in late 1998, further analysis of quality improvements at this stage of project operation is constrained by a lack of relevant data. However, the improvement in teacher education initiated by the Project is

expected to produce a cadre of well-trained teachers who will improve the quality of education at the primary and lower levels, leading eventually to a greater availability of skilled manpower for higher economic performance by the country.

52. The Project, through decentralized operational responsibility and implementation of civil works to the provincial authorities, engendered community participation. Also, the improved quality of teacher training and educational environment led to increased awareness in the community about teacher education in TTCs. This is reflected in the increase in the number of “out-plan” students to about 35 percent in 1999 compared to 15 percent in 1995. Out-plan students refer to those students who are admitted purely on merit, on the basis of open competition, “in-plan” students are selected under quotas designed to promote social equity. This increase in out-plan students is expected to gradually balance the ratio of out-plan to in-plan students, leading to more emphasis on merit.

53. The Project has helped build the capacity of MOE departments and agencies, and provincial and district level education administrators. PCD’s overall project planning and management capacity has been strengthened. PCD now effectively coordinates the planning and implementation of all development projects in association with the concerned line agencies. The BME system has been established and integrated with MOE’s central BME system for sectorwide education information. By providing required technical skills and logistical support to ECS, PUCDA, and IMU, the Project has strengthened their capacities to efficiently manage all construction and procurement matters. TTC staff and provincial and district educational administrators have benefited from various in-country and foreign training in relevant academic fields, budgeting and financial management, leadership, facilities maintenance, data collection, and record keeping. These gains have been institutionalized and will benefit future projects.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

54. Overall, the Project is successful, based on the criteria of relevance, efficacy, efficiency, and sustainability. The Project has successfully achieved its appraisal objectives, which are relevant to ADB’s strategic objective to develop human capital by supporting education for improved access and quality, aimed to produce skilled manpower for income earning opportunities and poverty reduction. The Project has been effective in its objectives of improving the quality of education through the development of the teacher education system and training programs. By providing the TTCs with the requisite physical infrastructure, new curriculum, and teaching and learning materials, the Project has created the right environment for quality teacher education. The total enrollment in TTCs has increased to 4,468 against the appraisal target of 4,322. The share of women’s enrollment is up to 48 percent compared with about 40 percent in 1992-1993. Staff development through foreign and in-country training has made an important contribution to the institutional strengthening of MOE for project planning, management, monitoring, and evaluation. The teacher education system under the TTCs has also been institutionalized through TDC and NTEAB. Apart from initial delays in consultant selection and civil works, MOE has implemented the Project efficiently. All physical and technical components were completed within the six-month’s revised loan closing date. Although some lower priority civil works were dropped by the Government based on a detailed needs analysis during implementation, the overall requirements for facilities improvement were fully met. The Project is considered sustainable. Despite the country’s fiscal difficulties, the Government is committed to providing adequate budgetary allocations for the proper O&M of the project facilities. In addition to these direct effects, the Project has helped strengthen

stakeholders' involvement at various levels and community participation which will benefit future projects during formulation and implementation.

B. Lessons Learned

55. The Project provides some valuable lessons in planning future assistance to the country, particularly in designing projects in support of the Government's investment program in the education sector:

56. These lessons include the following:

- (i) Early stakeholder's involvement in project design can help ensure project quality and minimize start-up delays by timely site selection and other preparatory work for project implementation. Early understanding of ADB's procedures for consultant selection and advance actions can expedite the recruitment of consultants and improve project implementation.
- (ii) Capacity building at all levels of project management, including direct beneficiary agencies, and a close monitoring and evaluation system, including classroom teaching, should be given more attention for sustained outcome.
- (iii) All project implementation arrangements, including recruitment of additional staff, should be discussed in depth and agreed at the formulation stage of projects. The Government's long-term commitment to a sectorwide approach to development for improved access, with emphasis on basic education and quality improvement, should be an important consideration for future assistance by ADB.
- (iv) Sufficient budgetary allocations for the proper O&M of the project facilities should be assured during project formulation. This issue of the sustainability of project benefits should be accorded particular importance for any new project, since the Government's current education sector expenditures are largely dependent on external funding.
- (v) Future ADB assistance to the sector should be based on a long-term commitment to the country's needs for continuity in support, while ensuring a conducive policy environment for achieving the maximum development impact. The possibility of support through linkages with livelihood and poverty reduction programs should be explored where appropriate.

C. Recommendations

1. Project-related

a. Future Monitoring

57. Based on the current status of operation of the Project, the following recommendations are made:

- (i) To ensure quality teacher education, TDC should prepare monitoring indicators for TTCs and the teaching patterns of TTC graduates. These indicators should

be designed to assess teachers' effectiveness in teaching the new curriculum and using the new teaching methods introduced by the Project.

- (ii) MOE should take appropriate measures to ensure effective utilization of all project facilities by providing an adequate O&M budget. The water supply and electricity problems of the TTCs need to be rectified without delay.
- (iii) TDC's capacity for monitoring and evaluating the new curriculum and the skills of TTC-trained teachers will need to be strengthened to enable it to play an effective role in teacher education development. TDC needs to adopt a system for upgrading the curriculum and skill training program for teachers. In addition to preservice training, TDC should be more active in in-service training of teachers.
- (iv) To sustain the improvements made to the teacher education system, NTEAB should continue to pay close attention to the proper implementation and monitoring of these reforms. NTEAB and TDC should effectively collaborate in this regard.

b. Covenants

58. ADB should monitor whether MOE takes a decision, which should be made in consultation with ADB, to convert two state enterprises relevant to the education sector, the Educational Printing Enterprise and the Lao National Printing Works, to other forms of ownership. The O&M of the project facilities and BME activities will also need to be monitored.

c. Timing of the Project Performance Audit Report

59. The Project performance audit report should be prepared in 2003 to meaningfully assess the Project's operational performance and development impacts.

2. General

60. With increasing primary and secondary school enrollment, the shortage of teacher is becoming a serious problem. MOE should take steps to improve the overall attractiveness of teaching as a career. MOE should consider increasing teachers' salaries, which are low relative to those in the public service. The goal of quality education will be extremely difficult to meet and sustain unless salaries improve.

61. The country's education system is quite decentralized. Responsibility for school operations is largely left to the principal. To make such a decentralized environment more productive, more attention should be paid to strengthening principals' skills in instructional supervision, leadership, and community-school relations.

APPENDIXES

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2	Project Implementation Schedule	20	5, 14
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**INDICATIVE LIST OF CIVIL WORKS
(Appraisal vs. Actual)**

Planned Civil Works	Completed Works
Luang Prabang Teacher Training College (TTC) (Primary & Lower Secondary)	
1. Relocate primary TTC to existing lower secondary TTC site.	Completed relocation.
2. Construct 1 ½ standard education building (2 level) (10/12 classrooms, 1 laboratory, 1 library).	Constructed auditorium (dining hall), and kitchen.
3. Construct 8 standard student dormitory blocks.	Constructed 8 standard student dormitory buildings.
4. Construct new staff accommodation.	Dropped.
5. Renovate existing lower secondary TTC facilities and extend existing services (water, power, drainage, etc.).	Renovated 4 classroom buildings, laboratory building, administration office, and library building; provided water supply and power system.
Champassak (Primary and Lower Secondary)	
1. Construct new kitchen block and upgrade dining hall.	Constructed new kitchen block, classroom, and laboratory building and library.
2. Renovate existing facilities.	Renovated 4 existing dormitory buildings, auditorium, 1 office building and 2 toilets; provided water supply and electrical system.
Ban Kheun Village TTC - Vientiane Province (Primary and Lower Secondary)	
1. Relocate LSTTC to existing PTTC site.	Completed.
2. Construct 1 ½ standard education building (2 level) (11 classrooms, 1 laboratory, 1 library).	Constructed 12 classroom building, 1 laboratory building, library, auditorium (dining hall), kitchen, administration building.
3. Construct 10 standard student dormitory blocks.	Constructed 6 student dormitory buildings.
4. Construct new staff accommodation.	Dropped.
5. Renovate existing lower secondary TTC facilities and extend existing services.	Dropped.
Khangkai Village TTC, Xieng Khouang (Primary and Lower Secondary)	
1. Construct 2 standard education blocks (2 level) (10 classrooms, 1 laboratory, 1 library plus administration and teachers' rooms).	Constructed 12 classroom building, 1 laboratory building, 1 library, administration building with teachers' room; provided water supply and electrical system.
2. Construct 14 standard student dormitory blocks.	Constructed 6 standard student dormitory building.

Planned Civil Works	Completed Works
3. Construct new dining hall, kitchen, college store, clinic and toilets. 4. Construct new staff accommodation.	Constructed new dining hall (auditorium), and kitchen. Dropped.
Savannakhet TTC (Primary and Lower Secondary)	
1. Construct new kitchen block and upgrade dining hall. 2. Renovate existing facilities and extend existing services.	Constructed new kitchen block, administration building (dining hall), laboratory building and library. Renovated 3 existing dormitory buildings, 3 classroom buildings, auditorium, workshop and 2 toilet blocks; provided water supply system
Dongkham Xang Village TTC Vientiane Prefecture Municipality (Primary)	
1. Construct 1 standard education block (2 level) (3 classrooms, 1 laboratory, 1 library plus administration and teachers' rooms). 2. Construct 7 standard student dormitory blocks. 3. Construct new dining hall, kitchen, college store, clinic and toilets. 4. Construct new staff accommodation.	Constructed 8 classroom building, 1 laboratory building, 1 library, administration building with teachers' room; provided water supply system. Constructed 6 standard student dormitory buildings. Constructed new dining hall (auditorium) and kitchen. Dropped.
Luang Namtha TTC (Primary)	
1. Construct 1 standard education block (2 level) (4 classrooms, 1 laboratory, 1 library plus administration and teachers' rooms). 2. Construct 11 standard student dormitory blocks. 3. Construct new dining hall, kitchen, college store, clinic and toilets. 4. Construct new staff accommodation. 5. Extend existing services.	Constructed 8 classroom building, 1 laboratory building, 1 library, administration building with teachers' room; provided water supply system. Constructed 6 standard student dormitory buildings. Constructed new dining hall (auditorium) and kitchen. Dropped. Dropped.
Saravane TTC (Primary)	
1. Construct 1 standard education block (2 level) (4 classrooms, 1 laboratory, 1 library plus administration and teachers' rooms). 2. Construct 9 standard student dormitory blocks. 3. Construct new dining hall, kitchen, college store, clinic and toilets.	Constructed 8 classroom building, 1 laboratory building, 1 library, administration building with teachers' room; provided water supply system. Constructed 6 standard student dormitory buildings. Constructed new dining hall (auditorium) and kitchen.

Planned Civil Works	Completed Works
4. Renovate existing facilities.	Dropped.
5. Extend existing services.	Dropped.
<p>Institute of Pedagogy</p> <p>1. Rehabilitation</p> <p>(a) Education Buildings</p> <ul style="list-style-type: none"> • Classroom blocks nos. 5, 8 & 9 • Chemistry block no.1 <p>(b) Residential Buildings</p> <ul style="list-style-type: none"> • 10 Dormitory blocks • 4 Villas • Staff Apartment blocks <p>(c) Amenities</p> <ul style="list-style-type: none"> • Assembly Hall <p>2. New Construction</p> <p>(a) Educational Facilities</p> <ul style="list-style-type: none"> • Classroom blocks to comply with the Arab Gulf Fund Master Plan 1 Two-level (60 x 10) 2 One-level extensions to existing classroom blocks <p>(b) Residential Buildings</p> <ul style="list-style-type: none"> • Student dormitory blocks to replace existing temporary sub-standard blocks • Staff Apartment blocks <p>(c) Site Works</p> <ul style="list-style-type: none"> • Site preparation and upgrading of water reticulation system 	<p>Not done under this Project as the same work was carried out under Loan 1374-LAO: <i>Postsecondary Education Rationalization Project</i></p> <p>Renovated 1 villa, 2 staff housings and provided water supply system</p> <p>Dropped</p> <p>Constructed 1 two-level classroom building</p> <p>Transferred to Loan 1374-LAO(SF): <i>Postsecondary Education Rationalization Project</i></p> <p>Transferred to Loan 1374-LAO(SF): <i>Postsecondary Education Rationalization Project</i></p>
<p>Teacher Development Center</p> <p>1. New Construction</p> <ul style="list-style-type: none"> • 1 single level building 600 square meter (m²) 	<p>Constructed 1 two-storey TDC building (880 m²)</p>

PROJECT IMPLEMENTATION SCHEDULE

Project Activities	1992				1993				1994				1995				1996				1997				1998			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
D. Staff Development	1. In-Country	Design																										
		Actual																										
	2. Foreign	Design																										
		Actual																										
E. Instructional Materials	1. Development	Design																										
		Actual																										
	2. Printing/Prod	Design																										
		Actual																										
	3. Distribution	Design																										
		Actual																										

TTC Group 1 1993-1994 Vientiane Prefecture, Luang Namtha, Luang Prabang, Xieng Khouang, Vientiane Province

TTC Group 2 1994-1995 Savannakhet, Champassak

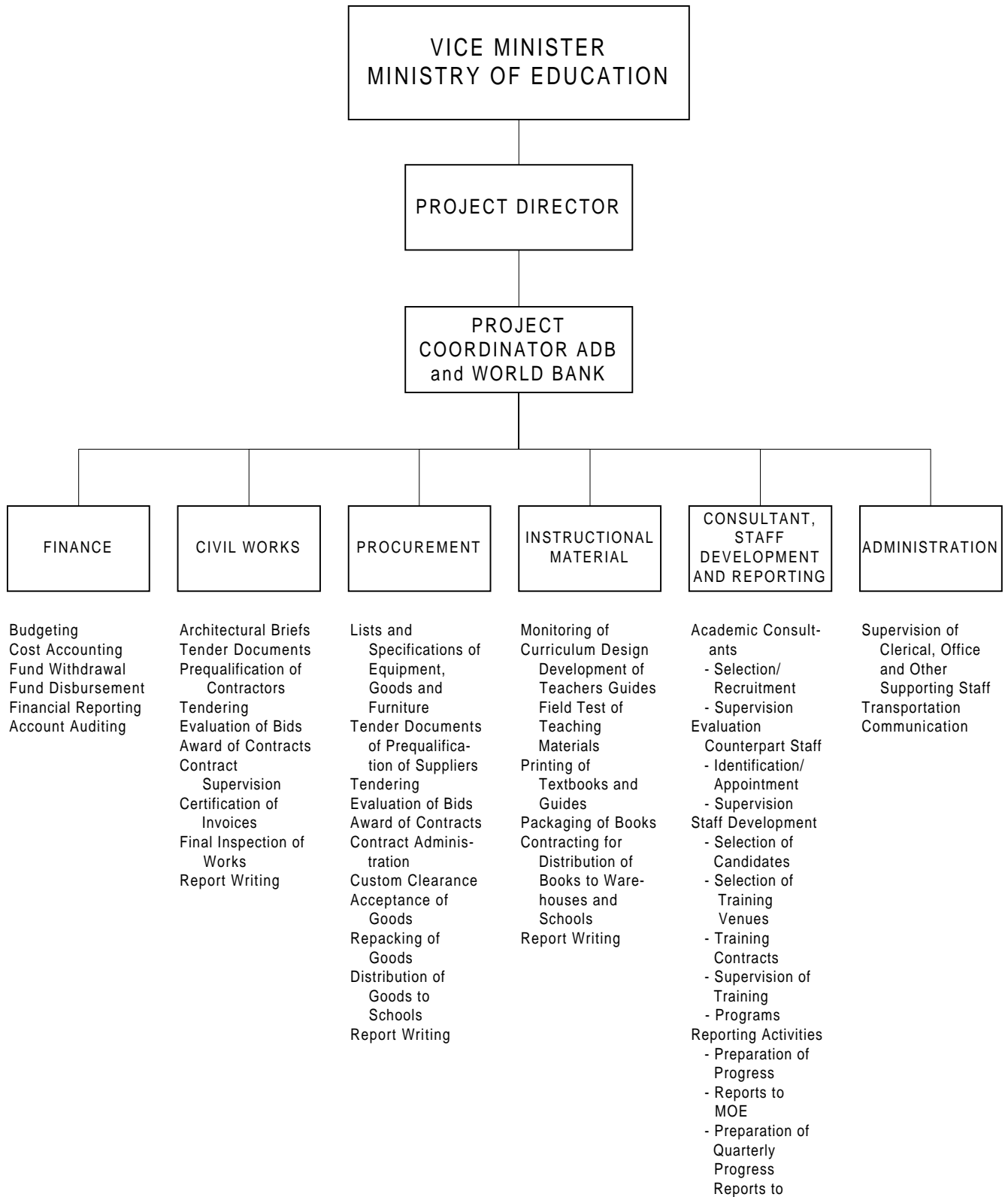
TTC Group 3 1995-1996 Sayaburi, Saravane, Phongsali

TTC Group 4 1996-1997

Teacher Development Center (TDC) Dong Dok 1993-1994

 Appraisal Estimate
 Actual Implementation

ORGANIZATIONAL STRUCTURE OF THE PROJECT IMPLEMENTATION UNIT



DETAILED COST ESTIMATE AND FINANCING ARRANGEMENTS

(\$'000 - contingencies distributed)

APPRAISAL								
Categories	Foreign Currency	TOTAL Local Currency	Total	Foreign Currency	BANK Local Currency	Total	Govt of Norway Foreign Currency	GOVT Local Currency
A. Civil Works								
1. Site Development	200	370	570	200	210	410	0	160
2. Rehabilitation	340	400	740	340	220	560	0	180
3. New Construction	3,030	2,480	5,510	3,030	1,370	4,400	0	1,110
Sub-Total	3,570	3,250	6,820	3,570	1,800	5,370	0	1,450
B. Furniture	370	310	680	370	180	550	0	130
C. Equipment & Vehicles								
1. Equipment	790	60	850	790	60	850	0	0
2. Vehicles	110	10	120	110	10	120	0	0
Sub-Total	900	70	970	900	70	970	0	0
D. Consulting Services								
1. Design & Supervision	0	660	660	0	660	660	0	0
2. Academic Consultants	1,830	430	2,260	0	430	430	1,830	0
Sub-Total	1,830	1,090	2,920	0	1,090	1,090	1,830	0
E. Staff Development								
1. Foreign Fellowships	340	30	370	170	30	200	170	0
2. Local Training	0	1,280	1,280	0	1,280	1,280	0	0
3. Books & Trng Materials	130	0	130	130	0	130	0	0
Sub-Total	470	1,310	1,780	300	1,310	1,610	170	0
F. Instructional Materials								
1. Production & Printing	1,520	1,230	2,750	1,520	780	2,300	0	450
2. Distribution	280	340	620	280	220	500	0	120
Sub-Total	1,800	1,570	3,370	1,800	1,000	2,800	0	570
G. Project Implementation & Recurrent Cost								
1. Project Implementation Unit	0	280	280	0	130	130	0	150
2. Monitoring & Evaluation	0	110	110	0	50	50	0	60
3. Operation & Maintenance	0	520	520	0	250	250	0	270
4. Research Studies	0	30	30	0	20	20	0	10
Sub-Total	0	940	940	0	450	450	0	490
H. Taxes and Duties	0	460	460	0	0	0	0	460
I. Service Charge	460	0	460	460	0	460	0	0
TOTAL PROJECT COST	9,400	9,000	18,400	7,400	5,900	13,300	2,000	3,100
ACTUAL								
A. Civil Works								
1. Site Development	0	7	7	0	7	7	0	0
2. Rehabilitation	701	378	1,079	701	378	1,079	0	0
3. New Construction	5,044	4,322	9,366	5,044	2,724	7,768	0	1,598
Sub-Total	5,745	4,707	10,452	5,745	3,109	8,854	0	1,598
B. Furniture	687	351	1,038	687	344	1,031	0	7
C. Equipment & Vehicles								
1. Equipment	487	0	487	487	0	487	0	0
2. Vehicles	243	1	244	243	1	244	0	0
Sub-Total	730	1	731	730	1	731	0	0
D. Consulting Services								
1. Design & Supervision	0	163	163	0	163	163	0	0
2. Academic Consultants	1,596	24	1,620	0	24	24	1,596	0
Sub-Total	1,596	187	1,783	0	187	187	1,596	0
E. Staff Development								
1. Foreign Fellowships	399	0	399	128	0	128	271	0
2. Local Training	0	605	605	0	605	605	0	0
3. Books & Trng Materials	0	0	0	0	0	0	0	0
Sub-Total	399	605	1,004	128	605	733	271	0
F. Instructional Materials								
1. Production & Printing	714	0	714	714	0	714	0	0
2. Distribution	0	0	0	0	0	0	0	0
Sub-Total	714	0	714	714	0	714	0	0
G. Project Implementation & Recurrent Cost								
1. Project Implementation Unit	0	235	235	0	101	101	0	134
2. Monitoring & Evaluation	0	63	63	0	12	12	0	51
3. Operation & Maintenance	0	278	278	0	20	20	0	258
4. Research Studies	0	18	18	0	0	0	0	18
Sub-Total	0	594	594	0	133	133	0	461
H. Taxes and Duties	0	550	550	0	0	0	0	550
I. Service Charge	222	0	222	222	0	222	0	0
TOTAL PROJECT COST	10,093	6,995	17,088	8,226	4,379	12,605	1,867	2,616

STATUS OF COMPLIANCE WITH LOAN COVENANTS

(as of 24 April 2000)

Reference in Loan Agreement	Covenants	Status of Compliance
Section 4.01 (a)	1. The Borrower will ensure that the Project is carried out with due diligence and efficiency, and in conformity with sound administrative, financial, engineering, environmental, and educational practices.	Complied with
Section 4.02	2. The Borrower will make available, promptly as needed, the funds, facilities, services, land, and other resources that are required, in addition to the proceeds of the loan, for the implementation of the Project, and for the operation and maintenance of the project facilities.	Complied with
Section 4.03 (a)	3. In carrying out the Project, the Borrower will ensure that competent and qualified consultants and contractors, acceptable to the Borrower and the Asian Development Bank (ADB), are employed upon terms and conditions satisfactory to both.	Complied with
Section 4.03 (b)	4. The Borrower will ensure that the Project is carried out in accordance with plans, design standards, specifications, work schedules and construction methods acceptable to the Borrower and ADB. The Borrower will ensure that such plans, design standards, specifications, work schedules, and any material modifications subsequently made therein are provided to ADB promptly after their preparation.	Complied with
Section 4.04	5. The Borrower will ensure that the activities of its departments and agencies with respect to the implementation of the Project and the operation of project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.	Complied with
Section 4.05 (a)	6. The Borrower will make arrangements satisfactory to ADB for the insurance of project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.	Complied with
Section 4.05 (b)	7. The Borrower will ensure that goods imported for the Project and financed out of the proceeds of the loan are insured against hazards incident to the acquisition, transportation, and delivery to the place of use or installation.	Complied with
Section 4.06 (a)	8. The Borrower will ensure that records and accounts are maintained to identify the goods and services and other items of expenditure financed out of the proceeds of the loan, to disclose the use thereof in the Project, to record the progress of the Project and to reflect, in accordance with consistently maintained sound accounting principles, the operations and financial condition of Ministry of Education (MOE) and all other agencies of the Borrower responsible for the implementation of the Project.	Complied with
Section 4.06 (b)	9. The Borrower will (i) ensure that separate accounts are kept for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by auditors acceptable to ADB; and (iii) furnish to ADB, as soon as available but in any event not later than 6 months after the end of each related fiscal year, unaudited copies of such accounts and financial statements, and not later than 12 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the report of the auditors, all in English.	Complied with
Section 4.06 (c)	10. The Borrower will enable ADB, if requested, to discuss the Borrower's financial statements for the Project and its financial affairs related to the Project from time to time with the Borrower's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB.	Complied with

Reference in Loan Agreement	Covenants	Status of Compliance
Section 4.07 (a)	11. The Borrower will ensure that ADB receives all such reports and information as it reasonably requests concerning (i) the loan, the expenditure of the proceeds, and maintenance of the service thereof; (ii) the goods and services and other items of expenditure financed out of the proceeds of the loan; and (iii) the administration, operations and financial condition of MOE and all other agencies of the Borrower responsible for the carrying out of the Project and operation of the Project facilities, or any part thereof.	Complied with
Section 4.07 (b)	12. The Borrower will ensure that ADB is sent quarterly reports on the implementation of the Project and on the operation and management of the project facilities. Such reports will be submitted in such form, in such detail, and within such a period as ADB reasonably requests, and will indicate, among other things, progress made and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, the proposed program of activities, and expected progress during the following quarter.	Complied with
Section 4.07 (c)	13. Promptly after physical completion of the Project, but in any event not later than three months thereafter or such later date as may be agreed for this purpose between the Borrower and ADB, the Borrower shall prepare and furnish to ADB a report, in such form and in such detail as ADB reasonably requests, on the initial operation of the Project.	Complied— submitted on 16 July 1999
Section 4.08	14. The Borrower will enable ADB's representatives to inspect the Project, the goods financed from the proceeds of the loan, and any relevant records and documents.	Complied with
Section 4.09	15. The Borrower will ensure that the project facilities are operated, maintained, and repaired in accordance with sound administrative, financial, engineering, environmental, educational, maintenance, and operational practices.	Complied with
Schedule 3, para. 11	16. The Borrower will establish immediately after the effective date, an imprest fund account with Banque pour le Commerce Extérieur Lao (BCEL) in order to make adequate amounts of the proceeds of the loan available for the financing of eligible project expenditures on a timely basis. Such eligible project expenditures will be the foreign currency cost of civil works, furniture, foreign fellowships, vehicles, and equipment; and local currency cost for instructional materials, and project implementation, and recurrent expenses. The imprest fund account shall be denominated in US dollars and shall be established and operated in accordance with terms and conditions satisfactory to ADB and consistent with its <i>Guidelines on Imprest Fund and Statement of Expenditures Procedures</i> and subject to detailed implementation arrangements agreed upon between the Borrower and ADB.	Complied with
Schedule 6, para. 2 (a)	17. The Borrower will establish before the effective date a project implementation unit (PIU) within MOES in Vientiane to implement the Project. The Borrower, through MOES, will appoint before the effective date a project director holding the position of senior department director and a full-time project coordinator, both with qualifications and experience acceptable to ADB. The project director will be the head of the PIU and will oversee the overall implementation of the Project. The project coordinator will be responsible for the day-to-day implementation of the Project and will, for that purpose, be responsible to the first vice-minister of MOES through the project director. The first vice-minister of MOES will have the overall responsibility for Project implementation.	Complied with
Schedule 6, para. 2 (c)	18. The Borrower, through MOES, will ensure that the PIU is staffed, on a full-time basis, by an adequate number of qualified and experienced personnel and that it is provided with adequate technical and support services, facilities, and equipment.	Complied with

Reference in Loan Agreement	Covenants	Status of Compliance
Schedule 6, para. 3 (a)	19. The Borrower, through MOES, will ensure that the PIU is responsible for the administration of the foreign fellowships and local training programs provided under the Project.	Complied with
Schedule 6, para. 3 (b)	20. The PIU will be responsible for the preparation of criteria for selecting candidates for the foreign fellowships and local training programs and will make arrangements for arranging such fellowships and programs, all as acceptable to ADB.	Complied with
Schedule 6, para. 3 (c)	21. The Borrower will require the recipients of such fellowships to serve in positions relevant to their training for a reasonable period of time upon their return from the training.	Complied with
Schedule 6, para. 4	22. The Borrower will ensure that all land, rights in land and rights of way required for the Project, including the construction of the 10 TTCs under the Project, are acquired and made available for the timely implementation of the Project.	Complied with
Schedule 6, para. 5	23. The Borrower will ensure that MOES sets up by 31 July 1992 a national teacher educational advisory board to provide, among other things, advice on policies and priorities for teacher education.	Complied with on 15 October 1992
Schedule 6, para. 6	24. The Borrower will consult ADB before taking any action to convert the two state enterprises relevant to the education sector, the Educational Printing Enterprise and the Lao National Printing Works, to other forms of ownership.	Complied with
Schedule 6, para. 7 (a)	25. The Borrower will exempt the consultants, contractors, and suppliers under the Project from all taxes, duties, fees, levies, and other impositions imposed under the laws and regulations in effect in the territory of the Borrower.	Complied with
Schedule 6, para. 8	26. The Borrower will assist ADB in its periodic reviews of project implementation with the Borrower. These reviews will take place semiannually commencing from the first year of project implementation.	Complied with
Schedule 6, para. 9	27. The Borrower will also assist ADB in its mid-term review of project implementation with the Borrower, which will be carried out during the third year of project implementation.	Mid-term review mission fielded in October 1995
Schedule 6, para. 10	28. Within two years from the effective date, the Borrower will undertake a study, in consultation with ADB, on the viability of cost recovery measures relating to instructional materials.	Complied with under TA 1570-LAO
Schedule 6, para. 11	29. The Borrower will allocate on an annual basis amounts sufficient, as agreed by the Borrower and ADB, to ensure adequate funding for its recurrent expenditure on education.	Complied with
Schedule 6, para. 12 (a)	30. The Borrower will ensure that the Department of Planning and Finance of MOES carries out studies periodically during project implementation on the benefits of the Project to the education system in the country, including information on the internal efficiency of the educational institutions in the country, satisfaction of social demand, and cost-effectiveness. The Borrower will ensure that reports are periodically prepared in the carrying out of such studies and that copies are sent annually to ADB.	Complied with
Schedule 6, para. 12 (b)	31. The Borrower will also ensure that the department of planning and cooperation of MOES continues to carry out monitoring and evaluation activities after the completion of the Project.	Being complied with

LOAN DISBURSEMENTS

(\$ million)

Year	Quarter	Actual Disbursement	Actual Cumulative	Cumulative Percentage of Actual Disbursement
1992	I	-	-	
	II	-	-	
	III	-	-	
	IV	0.425	0.425	3.37
1993	I	0.001	0.426	3.38
	II	0.000	0.426	3.38
	III	0.068	0.494	3.92
	IV	0.082	0.576	4.57
1994	I	0.002	0.578	4.59
	II	0.000	0.578	4.59
	III	0.002	0.580	4.60
	IV	0.004	0.584	4.63
1995	I	0.132	0.716	5.68
	II	0.047	0.763	6.05
	III	0.475	1.238	9.82
	IV	0.000	1.238	9.82
1996	I	0.421	1.659	13.16
	II	0.480	2.139	16.97
	III	0.298	2.437	19.33
	IV	0.116	2.553	20.25
1997	I	0.443	2.996	23.77
	II	0.927	3.923	31.12
	III	1.121	5.044	40.02
	IV	0.566	5.610	44.51
1998	I	1.338	6.948	55.12
	II	0.468	7.416	58.83
	III	1.188	8.604	68.26
	IV	2.234	10.838	85.98
1999	I	1.751	12.589	99.87
	II	(0.008)	12.581	99.81
	III	0.061	12.642	100.29
	IV	(0.037)	12.605	100.00
Total		12.605		

Source: Loan Financial Information System (LFIS)

**PROJECTION VS. ACTUAL
TOTAL ENROLLMENTS (1996-1999) TO MEET DEMAND
FOR TEACHERS IN 1999-2000**

Teacher Training College	Programs		Projected Enrollments			Actual Enrollments		
	Primary	Lower Secondary	Primary	Lower Secondary	Total	Primary	Lower Secondary	Total
<u>Primary-Lower Secondary</u>								
Xieng Khouang (new name: Khangkai, Xieng Khouang Province)	8+3	11+3	459	78	537	445	124	569
Savannakhet	11+1	11+3	421	276	697	101	450	551
Ban Kheun	11+1	11+3	230	471	701	248	485	734
Luang Prabang	8+3	11+3	462	153	615	289	530	789
Champassak	11+1	11+3	277	264	541	154	382	536
<u>Primary Only</u>								
Vientiane Prefecture (new name: Dongkham Xang)	11+1		251		251	387		387
Luang Namtha	8+3		420		420	480		480
Sayaburi ¹	11+1		110		110			
Saravane	8+3		339		339	422		422
Phongsali ^a	8+3		111		111			
TOTAL					4,322			4,468

¹ These two Teacher Training Colleges (TTCs) were dropped and merged with others as part of phasing out and rationalization programs of TTCs by Ministry of Education (MOE).

Note: After the phasing out and rationalization of the TTCs, with enhanced entry level qualifications, enrollment dropped markedly during 1995-1997. Preschool level teacher training programs for students with 5 years schooling + 2 years training, and similarly, 5+3 systems were closed down. Entry level qualifications were gradually enhanced to 8+3, and 11+1 systems in all TTCs following the rationalization.

Source: Education Quality Improvement Project, Appraisal Report, Appendix 18, page 3, MOE Annual Bulletins, 1991-1999, Borrower's Project Completion Report, March 1999.

ENROLLMENT DATA FOR ALL LEVELS OF EDUCATION: PROJECTION VS. ACTUAL

Year	Primary		Lower Secondary		Upper Secondary		Total	
	Projected	Actual	Projected	Actual	Projected	Actual	Projected	Actual
1990-91	570,103		99,091		34,411		703,605	
1991-92	586,838	581,900	104,748	88,447	35,952	31,826	727,538	702,173
1992-93	603,483	637,359	110,405	94,157	37,321	32,819	751,209	764,335
1993-94	620,128	681,044	116,062	105,497	39,220	38,176	775,410	824,717
1994-95	636,773	710,674	121,719	111,381	41,684	42,352	800,176	864,407
1995-96	653,418	757,508	127,376	119,771	44,727	42,163	825,521	919,442
1996-97	670,063	786,335	133,033	133,891	48,437	46,269	851,533	966,495
1997-98	686,708	821,546	138,690	150,195	52,936	56,520	878,334	1,028,261
1998-99	703,353	855,869	144,347	162,790	58,379	no data	906,079	1,018,659
1999-2000	720,000	892,681	150,000	175,690	64,962	no data	934,962	1,068,371

Note: Actual total enrolment for 1998-99 and 1999-2000 excludes upper secondary enrolment, data for which are not available.
 Source: Ministry of Education Annual Bulletins, 1991-1999