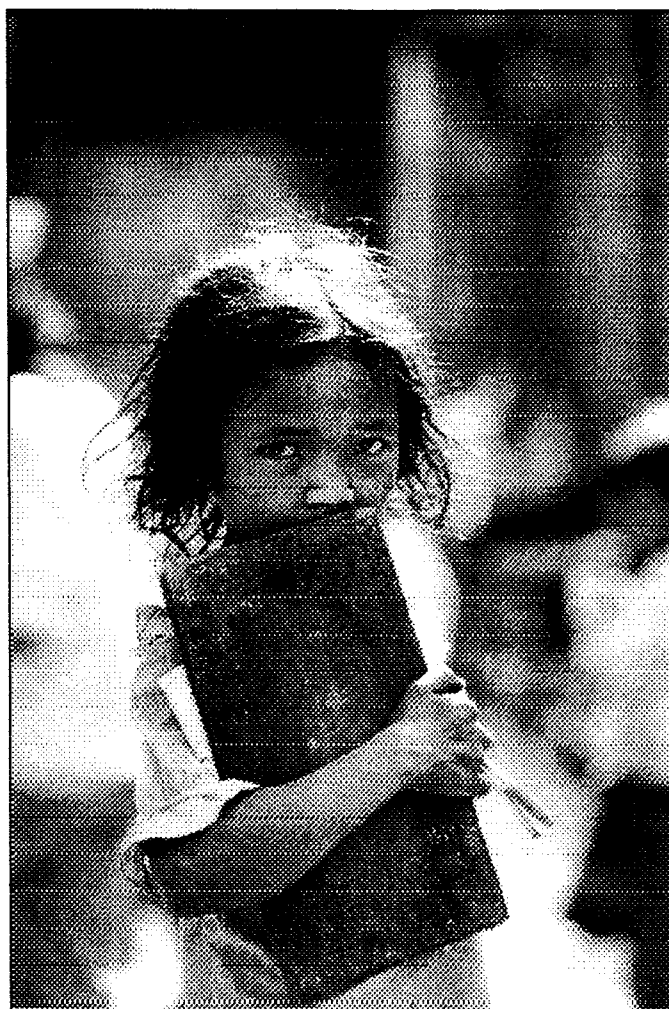


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THE ROYAL GOVERNMENT OF CAMBODIA



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Education Sector Review

1994

Volume 3



Education Investment Framework and Program

TABLE OF CONTENTS

	Page	
Section A	The Policy And Strategic Framework	1
Section B	Investment Program: Education Resource Management Summary of Proposed Program and Sub-Programs Program Framework B	8
Section C	Investment Program: Pre-School and Primary Education Summary of Proposed Program and Sub-Programs Program Framework C	16
Section D	Investment Program: Secondary Education Summary of Proposed Program and Sub-Programs Program Framework D	27
Section E	Investment Program: Higher Education Summary of Proposed Program and Sub-Programs Program Framework E	34
Section F	Investment Program: Teacher Education Summary of Proposed Program and Sub-Programs Program Framework F	41
Section G	Investment Program: Technical-Vocational Education and Training Summary of Proposed Program and Sub-Programs Program Framework G	48
Section H	Investment Program: Non-Formal Education Summary of Proposed Program and Sub-Programs Program Framework H	54
Section I	Implementation, Management and Benefit Monitoring: Modalities Matching Policies, Strategies and Programming Managing the Proposed Investment Program Alternative Management and Implementation Structures Ensuring Effective Benefit and Monitoring and Evaluation	59
Annex I	Summary of Programs: by Policy Objectives	65
Annex II	Medium Term Education Development: Indicative Policy and Strategic Directions 1994-2000	67

FOREWORD

This education sector review report consists of three distinct but inter-related volumes: Executive Summary Report (Volume 1), Education Sector Strategy Report (Volumes 2A and 2B) and Investment Framework and Program (Volume 3). In addition, specialist reports on education financing, systems analysis and management and teacher education have been prepared to supplement the review report.

This Investment Framework and Program (Volume 3) is intended to provide an indication of the broad parameters for future investment (by Government and donors) in education development over the medium term 1994-2000. The phasing, scale and costings are only indicative. The preparation of specific programs and operational plans will require further appraisal and detailed cost analysis by Government and potential donors.

A second intention of this volume is to show the linkage between the Government's medium term policy and strategic directions and the required balance and level of education development investment. The proposed Education Round Table, to be hosted by Government with Asian Development Bank assistance, will provide the opportunity to finalize policy and strategic frameworks and dovetail associated education aid assistance.

The broad message of this volume is to emphasize the need for a 'programmatic' rather than 'discrete project' approach to investment in education in Cambodia. The intention is to avoid a project 'wish list' unrelated to policy and strategic objectives. The Asian Development Bank's assistance to government to prepare an overall investment program for the first phase of basic education, focused on primary schooling, represents an important first step. The sector review urges that this 'program' approach be adopted over time for the development of investments for the other sub-sectors, especially secondary and higher education. Indicative programs for the different levels are detailed in Sections B-H of this volume, underpinned by the indicative policy and strategic directions in Section A and Annex II.

The proposed investment program needs to be over-arched by an effective implementation, management and monitoring system. The details of these systems will be determined by the nature and scale of particular programs and sub-programs. A 'program' approach will provide economies of scale for system operations, help reduce the tendency for proliferation of costly project units and enhance aid coordination. Some broad management principles and parameters, including alternative program management and monitoring models and modalities are offered in Section I. The purpose of the Program Frameworks B-H is to provide preliminary objectives, performance indicators and time-frames for use by management and monitoring teams.

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July 1994

A. THE POLICY AND STRATEGIC FRAMEWORK

The Policy Development Process

1. **The Background** Volume 2 of this report, especially Chapters 1 and 2, point to the significant achievements by government and local communities in the restoration of Cambodian education and training in the last 15 to 20 years. These developments have drawn on a number of government initiatives, with donor support, to revitalize the policy and strategy development process, including the Education For All Conference (1992), the State Plan for Education (1990/91) and the Rebuilding Quality Education and Training Conference (1994). This education sector study, and the associated policy and strategic framework, represent both consolidation and further development of these steps. This framework, in particular, is set within the overall national development policies and strategies emanating from the ICORC 1994 meeting, including proposals for public sector reform and restructuring.

2. **The Priorities** The proposed investment plan and program which follows is underpinned by a number of policy objectives and themes (Box 1). The sector analysis has pointed to the priority which should be given to urgent quality improvement at all levels, selective expansion of some services (especially basic schooling for grades 1-9), targeting of disadvantaged groups (particularly females, remote rural areas and minorities) and pressing measures for more efficient management and resourcing of education, alongside mobilization of additional resources. The ultimate goal of these policies and strategies will be to optimize the use of present and projected resources, reduce wastage within the system and generate appropriately educated school and college graduates who are both flexible and trainable for an emerging market economy. Above all, the top priority, consistent with government's position, is to revitalize the quality and standards of primary schooling (restructured as grades 1-6), linked to measures for enhanced access, participation and equity within lower secondary schooling.

Box 1 Broad Policy Objectives

1. **Quality Revitalization**
2. **Selective Expansion of Access**
3. **Cost Efficiency**
4. **Additional Resource Mobilization**
5. **Institutional Strengthening**

3. **The Policy Dialogue Process** It bears re-emphasis that the identified priorities, policy and strategic directions outlined in the sector study have not been developed in a 'vacuum'. The framework is based upon extensive dialogue with policy-makers and senior managers over an 8 month period in 1994. The process is summarized in Box 2. The indicative policy framework, still evolving, is outlined in Annex II. This framework represents a sound foundation for investment, subject to further refinement, detailing and discussion between government and donors. The proposed Education Round Table (November/December 1994) represents an ideal opportunity for government and the aid

Box 2 ADB Sector Study: Policy Dialogue: Milestones

community to finalize a package of acceptable policies and conditionalities to underpin medium term investment in education.

4. The policy development process of the study has allowed government to assume a high degree of 'ownership' of the study's policy proposals. A rough estimate is that government has invested more than 10,000 person-hours in the process. Further discussions with aid agencies, taking account of on-going and pipeline aid programming over the period July-November 1994, should assure broad consensus on priorities and approaches. For the basic education investment framework, the proposed ADB-financed Project Preparation Technical Assistance (PPTA) scheduled for September-November 1994 will help ensure a policy-based, coherent investment 'program' for this sub-sector.

- Preliminary policy discussions: November 1993 - March 1994
- Indicative Policy and Strategic Directions Paper: April 1994
- Refinement of the policy and strategic paper: May 1994
- Tripartite Review discussions: ADB-Government-TA: early June 1994
- Conditional MoEYS approval of the overall policy/strategy framework: early June 1994
- Senior education, planning and finance ministry staff seminars: June/July 1994
- Refinement of policy framework and sector analysis report: July 1994
- Presentation of revisions to ADB and government: August 1994

Source: ADB Mission Commentaries (1994), see Annex II

Policy and Strategic Directions, 1994-2000

5. **Key Strategic Considerations** Critical strategic considerations for the medium term planning of education and training in Cambodia are detailed in Volume 2, particularly Chapters 2, 3 and 4. These chapters detail broad strategic constraints and opportunities, management and financing respectively. Medium term planning for Cambodia's education services needs to take account of diverse patterns of demographic, human resource, employment and fiscal opportunities and constraints. Fundamental considerations are plans for restructuring and down-sizing the public service, uneven patterns of access to basic schooling, acute inefficiencies due to high repetition and drop-out from schools, the urgent need to improve the effectiveness of the teaching service and the repositioning of education for future market economy needs. Other contextual considerations are to ensure that education meets demand for equitable social opportunities and taps community support for education against a tight fiscal climate. The latter against a background of low GNP per capita (US\$ 150-240 p.a., 1993 fig) and falling real incomes. A crucial point is the currently low share of education aid on 'basic schooling' as compared to technical-vocational and higher education.

6. **A Framework: Policy and Strategic Objectives** The sub-sectoral reports presented in Volume 2 review a series of policy and strategic alternatives for improvement of education services in Cambodia. The indicative policy and strategic framework is presented in Annex II. As outlined in the Agenda for Action (Volume 2, Chapter 11), the over-arching policy objectives can be

summarized as: quality revitalization, selective expansion of access, cost-efficiency, additional resource mobilization, and institutional strengthening (Box 1). To assist government and donor agency investment planners and program officers, the main policy and strategic objectives and targets are summarized below. It should be noted that many of the proposed strategies are designed to 'cross-cut' different sub-sectoral levels of education and training provision.

7. Proposed Framework: Quality

Revitalization The proposed objectives, targets and strategies for raising the standards of education, particularly primary and secondary schooling, are summarized in Box 3. A priority is to increase the duration and effectiveness of instructional time, through lengthening and regularization of the school week and year. A second priority is to increase the availability and quality of class textbooks and other teaching aids, at all levels. This initiative would be linked to expansion of 'working teacher' training programs in the use of instructional materials and their management. A third proposal is to restore the morale and performance of school and university teachers through gradual salary rises, linked to MoEYS down-sizing, staff departure and redeployment schemes and vacation-time staff development programs.

Box 3 Quality Revitalization: Framework to 2000

<p><i>Objectives</i></p> <ul style="list-style-type: none"> • 40% gains in student competencies • towards 100% completion rate • wages/services ratio 67:33 <p><i>Strategies</i></p> <ul style="list-style-type: none"> • minimum of 24 hours per week instruction time • 1 book per student per subject • 50,000 p.a. 'working teachers' trained • estab secondary 'centers of excellence' • estab national exams, accreditation units • estab national inspectorate/supervisory units • abolition of 'buying a pass' • 65-70% of aid spending for quality improvement <p>Source: Mission (1994), see Annex II</p>
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8. Another component is the selective refurbishment of school and college buildings to achieve 'basic needs' levels, including improved plant design and water/sanitation facilities. An associated objective is to improve quality assurance systems through a nation-wide schools inspection and advisory support service and short-course management training for school principals and advisers. Overall, this framework proposes increased aid community and government investment in quality improvement measures (an indicative 65-70% of total aid, 1994-2000) focused on instructional materials provision, nation-wide teacher development (both pre-service and 'working teacher') and management strengthening at all levels.

9. **Proposed Framework: Selective Expansion of Access** A gradualist approach to selective expansion of services is proposed to avoid quantitative gains being at cost to quality (Box 4). Equity considerations argue for expansion to focus on 'low enrollment' areas and groups, including remoter rural districts, female secondary and further education and the minorities. The sector study endorses the introduction of a 6+3+3 system by 2000, including measures to achieve equitable participation in basic grades 1-9 schooling, development of village/commune based 'basic schools' and highly selective, merit-driven entrance to new province-based 'model secondary schools'. A second objective is to achieve equitable access to basic schooling for rural children (especially girls), through selective

**Box 4 Equitable and Selective Expansion:
Framework to 2000**

expansion of boarding facilities and additional classrooms in remote and minority areas and introduction of female secondary school scholarships schemes. An associated aim is expansion of adult literacy and complementary school programs for school drop-outs, especially in under-utilized community school districts.

10. The sector study framework urges the expansion of part-time teachers', higher and technical vocational programs. For working teachers, a nation-wide, vacation-time teacher training program is proposed, linked to a network of district and cluster-based resource centers and itinerant trainers/tutors for remote schools. Another proposed objective is increasing access to part-time university and technical-vocational programs through apprenticeship and extension services, including for education service staff. Affirmative action to increase female and minority area students' participation in pre-service teacher education and university studies, through merit-driven, targeted scholarships for the less well-off is proposed.

11. *A Framework for Improved Cost-Efficiency* The basic principle proposed is to optimize the use of current plant and staff before investing in additional provision. The overarching goals would be to abate per student cost growth of current services, alongside redirection of savings and additional resources towards quality measures. The wider objective would be to reduce current wages:services ratios to 2:1 by 2000. Quantifiable, measurable cost-efficiency performance indicators are suggested in Box 5.

12. One critical strategy would be the overall restructuring, down-sizing and redeployment of MoEYS administrative staffing, at central and provincial-district levels, linked to mobilization of efficient staff departure and restructuring schemes. A second objective would be to improve regulation of staff utilization rates, through improved staff planning systems and introduction of a longer working week and year for teachers. A pressing policy measure should be introduction

Objectives

- 100% enrollment, grades 1-6; population 1.9 million
- 2.25 million in 'basic education'
- 40% females in secondary enrollments
- move towards urban-rural equity

Strategies

- introduce 6+3+3 system
- expand commune grade 1-9 schools
- utilize schools a minimum of 8 hrs p.d
- selective additional classrooms, including boarding
- more part-time higher education
- new apprenticeship and on-the-job training
- targeted, merit-driven female/rural scholarships
- 15-20% of aid spending for access expansion

Source: Mission (1994), see Annex II

Box 5 Cost-Efficiency: Framework to 2000

Objectives

- wages/service ratio 67:33
- teacher, administrator ratio; 10:1

Strategies

- down-sizing education service by 15,000
- 50% salary rise, linked to down-sizing
- staffing ratio 60:1 (urban); 50-45 (rural)
- pupil/classroom ratios:80 (urban); 60 (rural)
- expanded part-time TVET and higher education
- early staff and building audits
- 10% of aid spending on short term measures

Source: Mission (1994), see Annex II

of automatic student promotion in schools, under-pinned by immediate quality assurance and monitoring measures as outlined in Box 3.

13. Another key cost-efficiency component would be the rationalization of the structure, organization and management of pre-service teacher education and university studies programs, including abolition of pre-university or 'preparatory year' and a short-term moratorium on program expansion. These initiatives would be linked to an overall Higher Education Master Plan, including possible introduction of part-time and distance learning programs for secondary schooling and teacher and higher education. An associated objective would be to increase classroom per student ratios and reduce per student costs through longer school and college opening hours. These initiatives would be preceded by early staff and building utilization audits as part of a national education staff and plant utilization and rehabilitation/development plan. Any measures for staff salary rises (e.g. 'Prime Pedagogique') should be linked to improved staff performance and enhanced work loads and responsibilities, not 'across-the-board' automatic incremental gains.

14. ***Institutional Development and Strengthening: A Framework***

The medium term objective would be to rationalize the role, function and size of central, provincial/district and school level operations and management. The primary aim would be for central HQ to focus on planning and monitoring, provincial directorates to carry the management responsibilities with district/school levels concentrating on implementation and delivery of services. An over-arching aim would be to enhance public accountability of MoEYS institutions, while divesting greater management autonomy to selected directorates and institutions. The main objectives, strategies and targets for the medium term 1994-2000 are summarized in Box 6.

15. Detailed structures and models will require further appraisal. Some broad principles are proposed. A pressing requirement is to complete the restructuring of the education ministry within the next two years to provide a small number of directorates with well-defined planning and monitoring functions. Increased management decentralization, including an enhanced 'voice' for School-Parents Committees (SPC) will need to be linked to extensive governance and management training. Any restructuring will need to assure improved aid investment planning, coordination and monitoring, linked to strengthened provincial aid field management. A pressing matter is the strengthening of Education Management Information Systems (EMIS) at all levels.

Box 6 Institutional Development: Framework to 2000

Objectives

- better client satisfaction
- effective decision-making
- greater public accountability

Strategies

- restructured education ministry by 1996
- senior managers trained by 2000
- selected autonomous support agencies by 1997
- national School-Parents Committees
- new Aid Coordination and Consultation groups
- new job descriptions and staff appraisal
- provincial Aid Management Units in place
- increased use of short term management development TA
- 5-10% of aid spending for TA and management training

Source: Mission (1994), see Annex II

16. The institutional strengthening framework proposes consideration of establishing a number of semi-autonomous education support agencies (e.g. Textbooks Agency, School Improvement Board) to plan and manage key operations and act as cost effective 'aid channels'. Proposals for greater autonomy for teachers colleges and university institutions would be linked to establishing Teacher and Higher Education Councils with planning and advisory functions. An early MoEYS Staff Audit is proposed to inform overall MoEYS staff development planning, including refurbishment of the Institute of Pedagogy as an education staff college for senior/middle managers.

17. **Key Measures: Mobilization of Additional Education Resources** Despite a tight fiscal climate, the study's financial analysis highlights the need for a greater share of recurrent expenditure for education. Alongside, mobilization of additional resources from local private and external sources is necessary. Proposed targets and modalities are summarized in Box 7.

Box 7 Mobilization of Additional Resources: Framework to 2000

<p>Objectives</p> <ul style="list-style-type: none"> • 15% of total recurrent expenditure to education • 75% of education budget for 'basic' schooling • 65% of aid for 'basic' education <p>Strategies</p> <ul style="list-style-type: none"> • 1-2% rises p.a. in education share to 2000 • reallocation of education budget by level • introduce PTA/SPC consolidated funds • tuition fees for higher education • community cost-share in building plans • 'matching grants' schemes via Schools Improvement Boards <p>Source: Mission (1994), see Annex II.</p>
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18. A critical measure is incremental gains in education's share of recurrent spending by government over the next 5 years. A second measure is to review education recurrent expenditure balance, including a greater share for 'basic education' and overall 'quality-related' services. The study proposes the phasing out of unofficial entrance fees for basic schooling, linked to regularization of voluntary parent-community contributions through SPC consolidated funds. Tuition fees for higher and vocational education are proposed. This should be linked to phasing out of 'direct' payments to individual schools and college staff. New mechanisms for encouraging cost-sharing for school refurbishment are proposed, including government/donor and community 'matching grant' schemes.

19. Measures to improve equity, targeting and mobilization of government and donor development support are proposed. One step would be to introduce equity-indexed budgeting, underpinned by provincial/district access and quality indicators. This framework includes measures for enhanced aid mobilization and disbursement through new MoEYS aid planning and management structures, linked to stronger budget planning and accounting systems. Overall, the prime objective should be to assure a greater share of government and aid spending on 'basic education', quality revitalization and disadvantaged areas and groups.

Overall Investment Program: A Summary

20. *Overview of Sub-Sectoral Investment Programs* An overall estimated education development investment program of US\$151.6 million is proposed for the medium term 1994-2000 (Box 8). The individual sub-sectoral investment programs are detailed in the following Sections, B-H, showing indicative phasing, scaling and costings for each program and sub-program. It should be emphasized that the various programs will require detailed appraisal, project preparation and implementation planning prior to government/donor investment. Nevertheless, the intention is to ensure design of the investments remain consistent with the government's overall policy and strategic framework and sub-sectoral and sectoral priorities. Volume 2 of the report proposes, in some instances, specialist TA to assist with detailed pre-project appraisal and planning activity. Some illustrations of this use of TA, based on scheduled ADB assistance for basic education investment planning, are detailed in Section I.

Box 8 Summary of Sub-Sectoral Programs 1994-2000

	Indicative Cost (US\$ million)
• Education Resource Management	28.2
• Pre-School/Primary Education	55.2
• Secondary Education	29.8
• Higher Education	14.6
• Teacher Education ^{a)}	6.7
• Technical Vocational Education	6.4
• Non-Formal Education	10.7
Total	151.6

Source: Mission (1994), see Sections B-H

Notes: a) Includes pre-service only, 'working teacher' programs within sub-sectoral plans

B. INVESTMENT PROGRAM: EDUCATION RESOURCE MANAGEMENT

21. *Proposed Overall Program Framework* An overall program of resource management reform is proposed, consisting of 11 inter-linked but distinct sub-programs. The wider objective of this program is to improve the responsiveness of education services delivery and management to clients' needs, including broader-based participation in the process. The near/medium term immediate objective is to improve the management capability and productivity of the service, especially policy/planning, quality assurance, program management and monitoring capacities at central, provincial, district and school levels. It is proposed that this overall program be overseen by a high level Program Monitoring Group (PMG), consisting of senior education ministry officials (director-general and above), finance, public audit and planning staff. The objectives, performance indicators, assessment modalities and inputs, phased scaled and costed for the period 1994-2000 are shown in in the following program framework B. These should be regarded as very indicative, subject to further appraisal and refinement.

22. *Overview of Proposed Sub-Programs* The indicative program is sub-divided into 11 inter-linked but discrete sub-programs (Box 9).

Box 9 Proposed Program Framework: Education Resource Management

Program	Indicative Cost 1994-2000 (US\$ million)
• MoEYS Organizational Restructuring	0.670
• Rationalization of Staffing and Salaries	11.520
• Management Information System Development	0.865
• Selective Line Directorate Strengthening	0.630
• Managerial Cadre Development	0.635
• MoEYS Staff Development	0.375
• Strengthening Education Support Agencies	3.000
• Community Mobilization Initiatives	6.525
• Establishing Quality Assurance/Audit Capacity	1.685
• School Leadership Training	1.835
• Strengthening Aid Management and Monitoring Capacity	0.410
Total	28.150

Source: Mission (1994), see Program Framework B.

An overview of objectives, indicators and inputs and management arrangements is summarized below:

- a. ***MoEYS Organizational Restructuring*** The objective would be to rationalize the current MoEYS organization, reducing the number of directorates from 16 to 7, establishing new functions and delineating clear lines of delegated authority to provincial and district levels. Target date for completion would be the end of 1995. The reform could be managed by a high level Program Monitoring Group, possibly with medium term TA in support. An indicative framework for reorganization is shown at Figure 3.3, Chapter 3, Volume 2A.

- b. ***Rationalization of Staffing and Salaries*** The objective would be to rationalize overall MoEYS staffing, including down-sizing from 75,000 to 60,000 by end of 1996, redeployment of ex-teachers back to schools and a hiring freeze on teachers (fixed at 55,000) until 1997. An associated objective would be to gradually increase staff salaries (30-40% by 1997), linked to down-sizing, and short-term support of a 50-60% supplement for teachers working 'double-shifts'. Assistance would be required to finance departure, redeployment and re-training schemes and implementation of teacher 'double-shifting'. This program could be managed by the Finance/Administration Directorate, with intermittent TA.

- c. ***Education MIS Development*** The objective would be to establish an EMIS within the Finance/Admin Directorate, including developing processes for information collection, collation and flow from district/provinces, other MoEYS directorates, and ministries. Long term TA may be needed to support MIS development and introduction of computerization. This program could be managed by the Director-General's office. Target date for completion, end of 1996.

- d. ***Selective Directorate Strengthening*** The objectives would be to build specific capacities in line directorates. Priorities are establishment of personnel records, finance/accounting procedures and policy/strategic planning and legislation formulation. A second priority would be initial strengthening of personnel directorates, linked to preparation of operational handbooks across the whole ministry. Selective line directorates could be managers, overseen by the Director-General's office via a small task force. Completion date for priority directorates would be end of 1996.

- e. ***Managerial Cadre Development*** The objective would be to improve selection and training processes for senior managers at central and provincial levels, including the inspectorate. Strategies could include recruitment of some expatriate Khmer under the IOM programs, in-house appointments (after performance review), design and implementation of short course training, linked to upgrading of the Institute of Pedagogy as a staff college. This program could be managed by the Human Resource Planning Directorate. Target would be to train 300-400 managers and 300 inspectors by end of 1996.

- f. ***MoEYS Staff Development*** The objective would be to provide short term on-the-job and short course training for all MoEYS staff by 2000. Training design to be completed by end of 1995. Target would be to provide training to all staff by 1998/99. This program could be managed by the Human Resources Planning Directorate.

g. ***Strengthening Education Support Agencies*** The near term objective (by end of 1994) would be to develop a framework for establishing semi-autonomous managing agencies, partly supported by government. The phasing proposed is: National Exams Board, School Construction Agency, Textbooks Board (by end of 1995/96), the remainder by end of 1997/98. Selective TA and operational finance would be required. This program could be managed by the Inspector-General's office.

h. ***Community Mobilization Initiatives*** The objective would be to formalize and mobilize community participation in planning, management and financing of schools. Proposed strategies include: establishment of a School Improvement Board to stimulate community cost-sharing, formation of a national PTA network and production of PTA financing handbooks. A local managing agent (possibly from the women's organizations) could be utilized. Target date for establishment would be end of 1995, operations from 1996.

i. ***Establishing Quality Assurance Capacity*** The objective would be to select, appoint and train a cadre of central and district level inspectors/supervisors, with 90% located in the districts. Strategies could include short course, on-the-job training linked to development of operational handbooks. Target date for establishment would be end of 1995; first phase of training by end of 1996. Managed by the Inspectorate-General's office.

j. ***School Leadership Training*** The objective would be to identify and train a cadre of 10,000 school leaders/managers. Strategies would include selection and performance review, strengthening local training delivery capacity (via district resource centers) and design and delivery of training programs and handbooks. Target date: completion of design phase end of 1995; first cycle of training completed by end of 1997. Provincial programs could be managed by the provincial directorates, supported by the inspectorate.

k. ***Strengthening Aid Management/Monitoring*** The objective would be to strengthen aid coordination, management and monitoring capacity by the end of 1995. Strategies could include short term TA for capacity-building in the Cabinet Directorate, establishing aid monitoring capability in the inspectorate-general, review of NGO project management mechanisms and frameworks and development of aid management units in line departments, autonomous units and provincial offices. This program could be managed jointly by the directorate and inspectorate-general's offices, in consultation with the Secretariat.

1. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve the responsiveness of Cambodian education services management and delivery to clients' needs, including broader participation in decision-making, management and financing of the system.	1.1 improved community satisfaction with service by 2000	1.1 Annual survey, Inspect-Gen	1.1-1.9 inclusive
	1.2 reduced decision making time by 1997	1.2 Annual sample survey, D-G office	• optimum political support for reorganization
	1.3 estab Nat Education Advisory Council by 1995	1.3 MoEYS annual report	• effective mobilization of community groups
	1.4 estab Nat PTA network by 1996	1.4 Commissioned study, 1996	• political will to down-size and redeploy staff
	1.5 increased community cost-sharing from 1996	1.5 Min of Finance study, 1995	• effective leadership at all levels
	1.6 School Improvement Board, estab from 1995	1.6 MoEYS annual report	• early estab of Inspectorate-General
	1.7 field/center staff ratio 30:1 by 1997	1.7 Public Audit staff list survey, 1997	• speedy completion of MoEYS reorganization
	1.8 estab autonomous support agencies by 1996	1.8 MoEYS annual report	• donor finance for departure scheme and safety nets
	1.9 estab prov/dist aid management unit by 1996	1.9 MoEYS annual report	• no radical change in education policy
(cf ADB baseline survey, 1994)			

4. Inputs: Education Resource Management (Indicative Only)

Sub-Programs	1994-1997 (US\$ '000s)					1998-2000 (US\$ '000s)					Overall Total
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA	Other	Sub-Total	
a) MoEYS Restructuring Program	225	125	150	25	525	60	50	35	0	145	670
Organizational reform process	0	75	100	0	175	0	0	0	0	0	
Job descriptions prep	25	25	30	25	105	0	25	25	0	50	
Operational handbook prep	50	25	20	0	95	10	25	10	0	45	
Selective refurbishment	150	0	0	0	150	50	0	0	0	50	
b) MoEYS Staff Rationalization	0	300	100	11,100	11,500	0	0	20	0	20	11,520
Staff departure scheme	0	0	20	4,500	4,520	0	0	0	0	0	
Double shift teacher supplements	0	0	40	6,000	6,040	0	0	10	0	10	
Redeployment/retraining scheme	0	300	40	600	940	0	0	10	0	10	
c) Education Management Info Systems	195	80	280	0	555	130	55	125	0	310	865
Personnel record system	25	10	20	0	55	10	10	10	0	30	
Finance/accounts records	50	10	50	0	110	20	10	20	0	50	
Other system development	100	50	150	0	300	100	25	75	0	200	
Education mapping	20	10	60	0	90	0	10	20	0	30	
d) Line Directorate Capacity Building	145	35	190	0	370	65	75	120	0	260	630
Strategic planning	15	5	30	0	50	5	5	30	0	40	
HRD planning	15	5	30	0	50	5	5	30	0	40	
Cabinet directorate	15	5	30	0	50	5	5	30	0	40	
Provincial/district services	100	20	100	0	220	50	60	30	0	140	
e) Managerial Cadre Development	180	40	120	150	490	30	25	40	50	145	635
Khmer expatriate scheme	10	0	10	150	170	0	0	10	50	60	
Education staff college	150	10	20	0	180	20	10	10	0	40	
Senior manager training	20	30	90	0	140	10	15	20	0	45	
f) Other Staff Development	35	60	90	0	185	10	110	70	0	190	375
HRD planning system	25	5	30	0	60	0	5	10	0	15	
Training needs master plan	0	5	30	0	35	0	5	10	0	15	
Training program assistance	10	50	30	0	90	10	100	50	0	160	

Sub-Programs	1994-1997 (US\$ '000s)				1998-2000 (US\$ '000s)				Overall Total		
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA		Other	Sub-Total
g) Strengthening Support Agencies	185	105	760	570	1,620	175	135	500	570	1,380	3,000
National exams board	75	50	300	0	425	25	25	100	0	150	
School construction agency	25	25	150	30	230	25	10	50	20	105	
Textbooks board	75	25	300	40	440	25	50	50	0	125	
Other selected agencies	0	0	0	0	0	100	50	300	50	500	
King's Foundation for Excellence	10	5	10	500	525	0	0	0	500	500	
h) Community Mobilization Initiatives	105	105	120	3,020	3,350	20	75	80	3,000	3,175	6,525
School improvement board/fund	25	10	50	3,000	3,085	0	10	20	3,000	3,030	
National PTA network	10	25	30	20	85	0	15	20	0	35	
PTA governance development	50	50	20	0	120	0	30	20	0	50	
Professional teachers associations	20	20	20	0	60	20	20	20	0	60	
i) Inspectorate General Development	1,225	20	90	100	1,435	110	60	60	20	250	1,685
Overall institution strengthening	200	10	50	0	260	50	50	30	0	130	
Inspect/audit procedures/handbooks	25	10	20	0	55	10	10	20	0	40	
Provincial/district inspector transport	1,000	0	20	100	1,120	50	0	10	20	80	
j) School Leadership Training	525	25	80	0	630	1,025	100	80	0	1,205	1,835
Review of appointment procedures	0	0	20	0	20	0	0	0	0	0	
District resource center network	500	0	20	0	520	1,000	0	30	0	1,030	
School leadership management training	25	25	40	0	90	25	100	50	0	175	
k) Aid Management Strengthening	110	15	120	25	270	35	20	60	25	140	410
Aid monitoring development	10	5	50	25	90	10	5	20	25	60	
NGO networking study	0	0	20	0	20	0	5	20	0	25	
Provincial aid management development	100	10	50	0	160	25	10	20	0	55	
Total	2,930	910	2,100	14,990	20,930	1,660	705	1,190	3,665	7,220	28,150

C. INVESTMENT PROGRAM: PRE-SCHOOL AND PRIMARY EDUCATION

Pre-School Education

23. *Program Overview Program Overview* The long term objective of this sub-program would be to reposition government's role in pre-schooling, linked to enhanced community participation in the equitable expansion of access, financing and management of the sub-sector. The immediate objective would be to strengthen community-based management and delivery of pre-school services and government's capacity to provide policy, planning and quality assurance. The overall development program is shown in the following Program Framework C.1. The proposed objectives, performance indicators, assessment modalities and inputs, phased, scaled and costed, are detailed in the program framework.

24. *Sub-Program Summaries* A program of 6 inter-linked sub-programs is proposed, including one (*) financed by a block-grant from government:

Box 10 Proposed Program Framework: Pre-Schooling

Program	Indicative Cost 1994-2000 (US\$ million)
a) Master Policy and Plan Development	0.08
b) NPSA Institutional Strengthening	0.19
c) Curriculum Development	0.07
d) Teaching Aid Supply Development	0.37
e) Community Based Teacher Development	0.50
f) Equitable Service Delivery*	2.00
Total (excluding *)	1.21

Source: Mission (1994), see Program Framework C.1
 Note: * government financing only

- a. **Policy and Master Plan Development** The objective would be to develop a national pre-school policy and implementation plan, including proposals for enhanced commercialization and community-based participation in the subjects. A second goal would be to delineate a role for government, within a private providers network. Target date for completion, early 1995.
- b. **Institutional Strengthening** Within an overall policy framework, the objective would be to assist with capacity building for policy and planning and service delivery management and monitoring by government and a proposed autonomous pre-school agency. TA is proposed to assist with management and organization development. Start-up date would be mid/late 1995.
- c. **Curriculum Development** The objective would be to develop a national curriculum framework, including enhanced use of non-formal, community-based approaches, plus follow-up staff orientation. Target date for completion of framework, late 1995.
- d. **Teaching Aids Supply Development** The aim would be to develop a teaching aids supply system, including production of prototypes for development at community level. Another objective would be to help design an informal supply system, including toy-drives, production of inexpensive news-print booklets and distance learning materials. Target date for operations would be early/mid 1996.
- e. **Cost-Efficient Teacher Supply System** The objective would be to establish a cost-efficient teacher supply system, based on increased use of community-based groups, including parents and parent-child modalities. A second objective would be to design and deliver teacher development programs. Proposed start-up-date: mid 1996.
- f. **Equitable Service Delivery** The objective would be to optimize the management of government financing for pre-schooling through a block-grant to the proposed agency. The policy framework for use of the grant would be to stimulate privatization of pre-schools, redress inequities in coverage and assure quality management. Target date for operational start-up: mid/late 1996.



1. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To increase community participation in the selective expansion, management and financing of pre-schooling, including equitable access nationwide.	1.1 doubling enrollment by 2000 1.2 estab community-based services by 2000 1.3 equitable access by 2000 1.4 50% reduction in government cost-share by 2000 1.5 50% private schools by 2000 1.6 discontinued use of primary schools for pre-schooling (cf ADB baseline survey, 1994) ^a	1.1 MoEYS, NPSA annual reports 1.2 MoEYS, NPSA annual reports 1.3 MoEYS, NPSA statistics 1.4 MoF/P, NPSA annual audits 1.5 NPSA annual reports 1.6 MoEYS annual survey	1.1-1.6 inclusive <ul style="list-style-type: none"> • effective community mobilization • timely policy reforms • reduced urban bias of aid • fees/charges not prohibitive
2. Immediate Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To increase community capacity to manage and deliver pre-school services, linked to enhanced government policy development and monitoring capabilities.	2.1 establish autonomous NPSA by end 1995 2.2 revised polices by mid 1995 2.3 non-formal pre-schooling network by mid 1996 2.4 inc availability of teaching aids by 1996/7 2.5 revised national curriculum framework by end 1995 2.6 cadre of voluntary pre-school teachers by 1996 2.7 block grant to NPSA from 1996 2.8 NPSA acts as aid channel from 1996 (cf baseline studies ADB, 1994/95)	2.1 MoEYS, NPSA annual reports 2.2 MoEYS, NPSA annual reports 2.3 NPSA annual survey 2.4 NPSA annual survey 2.5 NPSA annual survey 2.6 NPSA annual survey 2.7 MoF/P annual report 2.8 NGO aid surveys	2.1-2.8 inclusive: <ul style="list-style-type: none"> • timely plan preparation • commercialization policy accepted • timely enactment of NPSA status • effective community cooperation • no radical decline in financing • effective NGO networking

3.	Outputs	Indicator of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
3a	National Pre-School Policy and Plan	3a Accepted by mid-1995	3a-3f inclusive • as 1.1-1.5 • as 2.1-2.8	3a-3f inclusive • as 1.1-1.5 • as 2.1-2.8
3b	Operational National Pre-School Association	3b In place; block grant from end 1995		
3c	Revised Curriculum Framework	3c Formulated by end 1995		
3d	Improved Teaching Aids Supply System	3d Operational from mid 1996		
3e	Cost-Efficient Teacher Supply System	3e Operational from end 1996		
3f	More Equitable Service Coverage	3f Equitable coverage by 2000		

4. Inputs (indicative only, US\$'000s)												
		1994-97					1998-2000					
		Capital	Training	TA	Other	Sub-Total	Capital	Training	TA	Other	Sub-Total	TOTAL
a	National Policy and Plan	0	5	40	5	50	0	5	20	0	25	75
b	NPSA Institutional Strengthening	40	10	60	10	120	20	10	20	20	70	190
c	Pre-School Curriculum	0	30	30	10	70	0	0	0	0	0	270
d	Teaching Aids Supply System Development	100	40	50	30	220	100	10	20	20	150	370
e	Community Based Teacher Development	50	100	50	30	230	50	150	50	20	270	500
f	Equitable Service Delivery Development	0	0	0	1,000*	1,000	0	0	0	1,000*	1,000	2,000
Total		190	185	230	85	690	170	175	110	60	515	1,205

* = NPSA block-grant from government.

Primary Education

25. **Proposed Overall Program Framework** An overall program of primary education rehabilitation is proposed consisting of 10 inter-linked but distinct sub-programs. The wider objective is to increase the number of suitably qualified primary school graduates by the year 2000. The near/medium term objective is to improve equitable access, effectiveness and efficiency of primary schooling, including mechanisms for mobilizing voluntary community finance contributions. The objectives, performance indicators, assessment modalities and inputs, phased, scaled and costed for the period 1994-2000 are shown in the following Program Framework C.2. These should be regarded as very indicative, subject to further appraisal and refinement.

26. **Program Linkages** This program should be considered in conjunction with other sub-sectoral and cross-cutting programs. Measures to underpin improved management, school inspection, school parents committees (PTAs), autonomous support agencies (e.g. exams board), are outlined in Section B. Measures and programs for improving pre-service teacher education are reviewed in Section F. Links with complementary primary education are provided in Section H. They are not repeated here in order to avoid repetition and 'double-counting' of proposed aid assistance. Overall consolidation will be provided in Section I. This section will consolidate primary and lower secondary development programs as a 'basic education' thrust, over-arched by the medium term Policy and Strategic Framework.

27. **Overview of Proposed Sub-Programs** The indicative program is provisionally sub-divided into 10 inter-linked sub-programs summarized below. Underpinning institutional management and pre-service teacher education programs are detailed in Sections B and F.

Box 11 Proposed Program Framework: Primary Education

Program	Indicative Cost 1994-2000 (US\$ million)
a) Curriculum and Textbook Development	14.1
b) National Exam and Testing System Development	0.8
c) Education Supplies and Equipment Program	10.6
d) Cost-Efficient Working Teacher Development	10.2
e) School Plant Rehabilitation Program	7.6
f) Mapping and Legislation Program	0.6
g) Selective Building Expansion Program	5.5
h) Minority Schools Building Program	3.9
i) Internal Efficiency Study	0.4
j) Community Mobilization Study	0.3
Total	54.0

Source: Mission (1994), see Program Framework C.2

The overview of the objectives, targets and management arrangements is summarized below:

- a. ***Curriculum and Textbook Development*** The objective would be to design a national curriculum framework by 1995. A second objective would be to strengthen the book production and distribution capacity, using government and commercial systems. Targets are 3-4 million books and 0.8-1.0 million teachers guides and supplementary texts per annum from late 1995/early 1996. The aim would be 1 book per student per subject in grades 1-5 by 1997/98. The program would be managed by the proposed Textbook Agency with long and short term TA support. This program should consolidate and expand the current UNICEF initiative. A second phase is envisaged from 1998-2000, including expansion to grade 6 and some book replacements.

- b. ***National Exam and Testing System Development*** The objective would be to expand the current competency development process and expand sample testing. The aim would be an extension of the 1993/94 exercise by end of 1995. Agreement on competencies in early 1995 is key to informing curriculum frameworks and textbook provision. A second objective would be to undertake a nation-wide centrally-run grade 5 examination in 1995. Short term TA and supplementary local training are included. Target date for completion early 1996. Institutional strengthening is dealt with in Section B. The program would be managed by the proposed National Exams Board or its equivalent.

- c. ***Education Supplies and Equipment Program*** The objective is to increase the availability of education supplies (paper, pencils) and especially reading books. The strategy would be rapid production of new readers. Target output 1-1.5 million p.a. from 1995/96. A second objective is to develop a national reading and monitoring scheme, linked to staff training. The program would be scaled down in 1998-2000. The program could be managed by the Directorate of Education Services, using government and private distribution networks.

- d. ***Cost-Efficient Working Teacher Development*** The objective would be to establish a working teacher development network using a combination of RTTC, district and cluster centers and school-based methods in remoter areas. Equipping 100-150 cluster centers p.a. in urban areas is envisaged and a smaller facility in selected remote schools. A 'cascade model' of trainer-trainers is proposed including training 2-3,000 resource persons and 5,000 remote school heads. The target is 40,000 teachers p.a., receiving 3-4 weeks vacation refresher training. The program would be managed through the proposed Teacher Education Unit.

- e. ***School Plant Rehabilitation Program*** The objective is to reach 'minimum needs' standards in 15-20,000 classrooms by 2000. The target would be repair and rehabilitation of 3-4,000 classrooms p.a. Provision would include safe water and sanitation arrangements. A combination of modalities is proposed including private contractors and school committee-run programs. The program would be preceded by establishment of 'minimum basics' criteria. A target would be a minimum of 20% cost-sharing by the community. The proposed School Construction Agency would manage the program, linked to project finance and proposals channelled via the School Improvement Board.

f. **Mapping and Legislation Program** The objective would be to conduct a school mapping and building conditions audit in late 1994 to inform future school development planning. The network of provincial/district officers would be used. Short term TA would help start-up the exercise and other data analysis. Target date for completion is early 1995. A separate sub-program will, with TA, help with preparation of new legislation or education provision in mid/late 1995. This sub-program would be managed by the proposed Strategic Planning Directorate.

g. **Selective Building Expansion Program** The objective would be to provide additional classroom space in over-crowded urban-dominated provinces, informed by the mapping and audit exercise. The objective would be to accommodate projected enrollment growth. Selection of recipient districts would be against agreed classroom utilization norms. A program of 3,000-4,000 extra classrooms is envisaged roughly 800-1,000 p.a. over the medium term outlook. Similar arrangements to program e) are proposed.

h. **Minority Schools Building Program** The objective would be to both refurbish existing plant and provide additional space as enrollment grows. A second objective would be to selectively provide dormitories to enhance access and attendance for minority children. Roughly 100 additional classrooms p.a. and 150-200 dormitories are the target over 5 years. A special aid management unit in selected provinces could be established, linked to the Construction agency and School Improvement Board. Start-up target date is mid-1995.

i. **Internal Efficiency Study** The objective would be to help government refine policies and plans for optimum staff and plant utilization. This could include this study's proposals for the introduction of 'flexi-shift' teaching contracts. This is a priority action. Proposed start-up is mid-late 1994. A special task force from education, finance/planning and audit ministries could manage the study. Short term TA is proposed.

j. **Community Mobilization Study** This study could be effectively an appraisal of the proposed School Improvement Board strategy, linked to examination of the scope for 'matching grants' and equity-indexing of education spending. The study, with TA support, could examine the scope and mechanisms for expansion and regulation of current community contributions. Start-up date late 1994.

1. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To increase the number of appropriately qualified primary school graduates for entry into secondary education, further studies and the labor market.	1.1 0.25 million p.a. by 2000 1.2 100% completion rate from 2000 onwards 1.3 40% gains in student competence by 2000 1.4 reduced repetition in grade 6 by 2000 1.5 improved employer and institutional satisfaction rates 1.6 increased demand for complementary secondary study (cf ADB baseline survey, 1994: output 0.14 million, completion 30%)	1.1 MoEYS annual reports 1.2 MoEYS annual reports 1.3 Exam and test studies 1.4 Tracer studies 1.5 Sample tracer studies 1.6 MoEYS annual reports	1.1-1.6 inclusive: <ul style="list-style-type: none"> • no radical change in education policy • education allocation 15% of budget by 2000 • introduce automatic promotion • 75% aid to basic education • speedy enactment of legislation • community mobilization effective

2. Immediate Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve the equitable access to and effectiveness and efficiency of primary education.	2.1 1.9 million enrolled by 2000 2.2 equal cross-province enrollment rates by 2000 2.3 45% girls enrolled 2.4 1 book per student per subject by 1998 2.5 25% under-qualified teachers only by 2000 2.6 40% improved student achievement by 2000 2.7 improved classroom teacher performance from 1997 2.8 20% down-sized education service by 1997 2.9 minimum 24 hours instructional time p.w. from 1997 2.10 staffing ratios (urban 1:60, rural 1:50) by 2000 2.11 pupil classroom ratios (80-65:1) by 2000 (cf ADB baseline study, 1994)	2.1 MoEYS annual reports 2.2 MoEYS annual reports 2.3 MoEYS annual reports 2.4 Textbook Agency survey 2.5 Teacher Education Unit reports 2.6 Nat Exams Unit reports 2.7 Nat Insp/Supervisor reports 2.8 Min of Fin Planning reports 2.9 PEO reports 2.10 PEO reports 2.11 MoEYS surveys	2.1-2.11 inclusive: <ul style="list-style-type: none"> • potential resistance to down-sizing • MoEYS resistance to efficiency gains • timely implementation of building/rehab programs • vacation-time teacher training • strict regulation of teaching hours • timely production of textbooks/aids • teacher training effective • effective TA available • recurrent spending: 70-80% for primary

3.	Outputs	Indicator of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
3.1	Improved Curriculum and Textbook Production System	Framework early 1995; 4 million books p.a. by 1997	3a-3n inclusive: • see 1.1 - 1.6 • see 2.1 - 2.11 • MoEYS annual reports • National Supervisory/ Inspection reports • Prov/district annual reports • National support agency reports • Interim project progress reports • Aid Monitoring Unit reports • School PTA report reviews (coordinated by MoEYS Education Management Information System, see Chapter 3)	3a-3n inclusive: as 1.1-1.6 as 2.1-2.11
3.2	Improved Exam and Testing System	pilot grade 5, 1995; Nat Exam Board from 1996		
3.3	Improved Education Equipment Supply System	per student allocation US\$2 p.a. from 1995		
3.4	Cost-efficient Working Teacher Development System	vacation, 'cluster' system; 10,000 p.a. from 1995		
3.5	Improved School Plant	4,000 classrooms p.a. refurbished, 1995-1999		
3.6	Improved Supervision/Inspection System	In place from 1995 (see Chapter 3)		
3.7	Improved School Mapping and Legislation	Map complete, early 1995; legislation end 1995		
3.8	Better Plant Utilization Plans	Enrollment within current plant; utilization rate 1:65-80		
3.9	Selective Additional Classrooms	750-1,000 p.a.; high population provinces		
3.10	Selective Minority School Development	15-20 schools in 4-5 provinces		
3.11	Better Staff Utilization System	regulated 36 hour week, 'flexi-shifts'		
3.12	Better Plant Utilization System	48 hour school week, 6 days opening		
3.13	Etab School Improvement Board	In place from 1995 (see Chapter 3)		
3.14	National PTA Network	In place from 1995/96 (see Chapter 3)		

4. Inputs: Primary Education (Indicative Only)

Sub-Programs	1994-1997 (US\$ '000s)					1998-2000 (US\$ '000s)					Overall Total
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA	Other	Sub-Total	
a) Curriculum and Textbook Development	5,000	950	300	850	7,100	5,000	850	300	850	7,000	14,100
National curriculum framework	0	200	50	50	300	0	100	50	50	200	500
Textbook production and distribution	4,000	500	200	600	5,300	4,000	500	200	600	5,300	10,600
Teachers guides and supplementary texts	1,000	250	50	200	1,500	1,000	250	50	200	1,500	3,000
b) National Exam and Testing System	75	350	75	100	600	50	100	25	25	200	800
Expanded competency testing	50	250	50	50	400	50	100	25	25	200	600
Pilot national grade 5 exam	25	100	25	50	200	0	0	0	0	0	200
c) Supplies, Readers and Equip Program	5,050	500	400	650	6,600	3,000	275	200	525	4,000	10,600
Primary school readers production	2,500	300	100	300	3,200	1,500	200	100	300	2,100	5,300
National reading scheme development	50	100	200	50	400	0	25	50	25	100	500
General education supplies program	2,500	100	100	300	3,000	1,500	50	50	200	1,800	4,800
d) Efficient Working Teacher Dev System	1,800	1,100	1,800	700	5,400	1,600	600	1,900	700	4,800	10,200
Establish cluster resource schools	1,000	200	100	100	1,400	1,000	200	100	100	1,400	2,800
Establish remote school system	500	300	200	100	1,100	500	200	300	200	1,200	2,300
Cascade delivery system	300	600	1,500	500	2,900	100	200	1,500	400	2,200	5,100
e) Existing School Plant Rehab	3,000	400	200	200	3,800	3,000	400	200	200	3,800	7,600
Repair/renovation program	2,000	400	100	100	2,600	2,000	400	100	100	2,600	5,200
Rehabilitation program	1,000	0	100	100	1,200	1,000	0	100	100	1,200	2,400
f) School Mapping Audit and Legislation	0	200	110	120	430	0	50	50	25	125	555
School mapping exercise	0	50	50	50	150	0	0	0	0	0	150
Buildings Audit	0	100	50	50	200	0	50	50	25	125	325
Legislative framework development	0	50	10	20	80	0	0	0	0	0	80
g) Selective Building Expansion	1,500	250	50	200	2,000	3,000	250	50	200	3,500	5,500
Over-crowded provinces program	1,500	250	50	200	2,000	3,000	250	50	200	3,500	5,500
h) Minority School Building Program	2,000	100	0	100	2,200	1,500	100	0	100	1,700	3,900
Additional classroom construction/rehab	500	100	0	100	700	500	100	0	100	700	1,400
Provision of dormitory facilities	1,500	0	0	0	1,500	1,000	0	0	0	1,000	2,500
i) Internal Efficiency Study	0	175	50	50	275	0	75	50	0	125	400
j) Community Mobilization Study	50	100	50	0	200	0	50	50	0	100	300
Total	18,475	4,125	3,035	2,970	28,605	17,150	2,750	2,825	2,625	25,350	53,955

D. INVESTMENT PROGRAM: SECONDARY EDUCATION

28. *Proposed Overall Program Framework* An overall program of secondary education development is proposed, consisting of 8 inter-linked but distinct sub-programs. The wider objective is to increase the number of appropriately qualified lower and upper secondary school graduates for entry into further studies and the local labor market, ensuring equitable access for disadvantaged areas and groups. The near/medium term objective is to improve equitable access and participation, effectiveness and efficiency of secondary schooling, including affirmative action for females and remoter rural groups. The objectives, performance indicators, assessment modalities and inputs, phased, scaled and costed for 1994-2000 are shown in the attached Program Framework D. These should be viewed as very indicative, subject to further appraisal and refinement.

29. The lower secondary grades 7-9 frameworks are included in this sub-sectoral development plan. As outlined in Section C, the grade 7-9 programs will be disaggregated as part of a 'basic education' program frameworks in Section I. The over-arching Policy and Strategic Framework for basic and secondary education is shown in Annex II.

30. *Overview of the Sub-Programs* The indicative program is shown below. Associated programs for primary education (e.g. the 'working teachers' program) are shown in Section C. Underpinning institutional management and teacher education program components are detailed in Sections B and F respectively.

Box 12 Proposed Program Framework: Secondary Education

Program	Indicative Cost 1994-2000 (US\$ million)
a) Secondary Curriculum and Textbook Development	4.1
b) National Exam and Testing Development	1.0
c) Secondary Education Supplies and Equipment Program	2.0
d) Secondary 'Working Teacher' Development Program	2.2
e) Existing School Plant Rehabilitation Program	6.8
f) Selective Building Expansion Program	5.6
g) Selective Scholarships Program	7.6
h) Specialist Access Policy Studies	0.5
Total	29.8

Source: Mission (1994), see Program Framework D.

The overview of the objectives, targets and implementation modalities is summarized below:

a. ***Secondary Curriculum and Textbook Development*** The aim would be to finalize a national curriculum framework by 1995. A second objective would be to strengthen book production capacity, using government and commercial providers. Targets are 1.8 million textbooks and 0.1 million teachers guides per annum from early 1996. This would provide 1 book per student per subject from 1997/98 in grades 7-12 (under a 6+3+3 system). The aim is to extend the UNICEF initiative into secondary schooling. The 1998-2000 phase envisages additional texts and some replacements. The program would be managed by the proposed Textbook Agency with long and short term TA support and training.

b. ***National Exam and Testing Development*** The aim would be to extend competency and national testing into secondary classes, grades 7-12 (interim 6-11). Agreement on competencies in mid/late 1995 is envisaged. Expansion of the UNICEF competency test program for grades 8 and 11 'exit points' is proposed for completion in 1996. A related objective would be to run a national exam for grades 8 and 11 in 1995 or 1996. Short term TA and training is envisaged. Institutional strengthening, linked to National Exam Board management of these initiatives, is detailed in Section B.

c. ***Secondary Education Supplies and Equipment Program*** The aim would be to increase availability of general education supplies and low-cost science and mathematics kits for schools. Target investment for supplies is US\$4 per student. Science kits and mathematics sets (and teachers booklets and guides) for each of 440 schools are envisaged. A scaled-down program is proposed for 1998-2000. The program would be managed by the Directorate of Education Services (see Section B), using government and private distribution networks.

d. ***Secondary Working Teacher Development Program*** The objective would be to improve the effectiveness of classroom teachers, using the resource center/cluster network (see Sections B and C). The target would be to provide round 20,000 teachers p.a. with 3-4 weeks vacation-time training at district/cluster centers and/or RTTCs via a trainer-trainer 'cascade' model. The program would be managed by the proposed Teacher Education Unit.

e. ***Existing School Plant Rehabilitation Program*** The objective would be to reach 'minimum needs' standards in 3-4,000 secondary school classrooms by 2000 with 600-800 repaired p.a. Provisions could include safe water and sanitation. The program would be preceded by 'minimum needs' definition. A second component is refurbishment of the proposed 20 centers of excellence (1 per province), including re-equipping and provision of boarding facilities. Some PTTCs and prestigious secondary schools should be a prime target for conversion and upgrading. The proposed program would be managed by the School Construction Agency, linked to use of community-run schools committees and private building contractors.

f. ***Selective Building Expansion Program*** The objective would be to provide additional classroom space for gradual enrollment expansion, focused on the development of commune/village

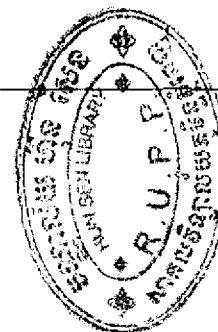
grade 1-9 schools. A target would be 400-500 new classrooms p.a.; a target of 2,500 over 1994-2000. Similar modalities to other building programs could be used, emphasizing a community cost-share.

g. ***Selective Scholarships Program*** One objective would be to enhance girls' access to secondary schooling, through a Female Scholarships Scheme. A target figure for recipients would be 50,000 scholarships p.a. by 1997. A small stipend (say US\$20 p.a.) would be provided to cover non-tuition costs. TA is proposed for initial design, targeting and implementation of the program for 1995/96. A second objective would be to increase the number of UPP graduates entering teaching via a merit-driven scholarships scheme for grade 12 students. Recipients of awards would be contracted as teachers post-graduation for a minimum of 5 years. Target is 1,000 new awards p.a. from 1995. Special implementation units would be established to manage these programs, in consultation with provincial offices and the proposed Higher Education Council.

h. ***Specialist Access Policy Studies*** Two studies are proposed beginning late 1994/early 1995. The first Secondary School Access study would be designed to assist provinces to formulate secondary school reorganization plans. The target is for completion by mid/late 1995. These provincial plans would help inform new plant and staff utilization policies and plans and additional building requirements. The second study would help advise government on establishment of a framework for introducing private providers into the secondary school system, including the required regulation and inspection systems. Short term TA is proposed for both studies, managed by the Strategic Planning Directorate.

1. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To increase the number of appropriately qualified lower and upper secondary school graduates for entry into further studies and the local labor market, including disadvantaged rural areas and females.	1.1 0.1 million grade 9 graduates p.a. by 2000	1.1 MoEYS annual reports	1.1-1.7 inclusive
	1.2 0.03 million grade 12 graduates p.a. by 2000	1.2 MoEYS annual reports	• no radical change in education policies
	1.3 100% completion rates from 2000	1.3 Exam and test studies	• non-agri work force size grows
	1.4 40% gains in students' competencies by 2000	1.4 Exam and test studies	• introduce automatic promotion
	1.5 abolition of university preparatory year from 1996	1.5 Higher Ed Council reports	• community mobilization effective
	1.6 improved employer and institutional satisfaction rates	1.6 Sample tracer studies	• education budget share 15% by 2000
	1.7 improved institutional and job placement rates	1.7 Sample tracer studies	• 75% aid to basic education
	(cf ADB baseline survey, 1994)		

2. Immediate Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve equitable access to and effectiveness and efficiency of secondary education, including targeted disadvantaged areas and groups.	2.1 0.44 million enrolled by 2000 2.2 equal cross-province enrollment rates by 2000 2.3 40% girls enrollment by 2000 2.4 1 book per student per subject by 1998 2.5 40% improved student achievement by 2000 2.6 improved teacher performance by 2000 2.7 20% graduate staff by 2000 2.8 20% education service down-size by 1997 2.9 min 24 hours per week instructional time from 1997 2.10 staffing norms (basic 60: secondary 25-35) by 2000 2.11 pupil classroom ratios (60:1) by 2000 (cf baseline studies ADB, 1994)	2.1 MoEYS annual reports 2.2 MoEYS annual reports 2.3 MoEYS annual reports 2.4 Textbook Agency Survey 2.5 Nat Exam Board Survey 2.6 Teach Ed Unit, Inspec survey 2.7 MoEYS annual reports 2.8 Min of Finance reports 2.9 PEO surveys 2.10 PEO surveys 2.11 PEO surveys	2.1-2.11 inclusive: <ul style="list-style-type: none"> • political resistance to down-sizing • MoEYS resistance to efficiency gains • timely implementation of building/rehab program • timely reorganization into grade 7-12 • speedy production of textbooks and aids • timely completion of TA access studies • community mobilization schemes/incentives effective • teacher-training effective • recurrent spending 25% for secondary ed • effective equity targeting of aid



3.	Outputs	Indicator of Achievement	Quantified/Assessed	Assumptions/Risks /Constraints
3.1	Improved Curriculum and Textbook Production System	Framework early 1995, 1.8 million books p.a. by 1998	3.1-3.12 inclusive	3.1-3.12 inclusive
3.2	Improved Exam and Testing System	'pilot' grade 8, 11 in 1995; Exam Board 1996	• see 1.1-1.7	• as 1.1-1.7
3.3	Improved Education Supplies/Equipment System	per student allocation US\$4 p.a. for 1995	• see 2.1-2.11	• as 2.1-2.11
3.4	Cost-Efficient Working Teacher Dev System	vacation, RTTC-based; 20,000 p.a. from 1996	• MoEYS annual reports	
3.5	Cost-Efficient School Rehab System	1,000 classrooms p.a., cost-shared; from 1995	• Nat Supervisory Unit reports	
3.6	Equitable Secondary Access System	20 centers of excellence by 1996; rural boarding and grade 1-9	• Prov/district reports	
3.7	Equitable Female Secondary Participation	0.18 million girls by 2000; 50,000 'scholarships'	• NGO field reports	
3.8	Better Plant and Staff Utilization	regulated agreed staffing norms etc (see 2.10, 2.11)	• Nat Support Agency survey	
3.9	Selective Additional Classrooms	400 p.a. 1995-2000; 80% rural grade 1-9 schools	• Interim progress reports	
3.10	Selective Ministry School Development	see Chapter 5	• Aid Monitoring Unit reports	
3.11	Improved Secondary Teacher Supply System	1,000 UPP-trained pa.. from 1996	• School PTA reports	
3.12	Better Private and Distance Sec School Plans	regulatory framework 1995; implementation 1996 onwards		

4. Inputs: Secondary Education (Indicative Only)

Sub-Programs	1994-1997 (US\$ '000s)					1998-2000 (US\$ '000s)					Overall Total
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA	Other	Sub-Total	
a) Curriculum and Textbook Dev	1,150	350	370	280	2,150	1,100	305	300	270	1,975	4,125
National curriculum framework	0	100	100	50	250	0	75	50	50	175	425
Textbook production and distribution	1,000	200	200	200	1,600	1,000	200	200	200	1,600	3,200
Teachers guides and supplementary texts	150	50	70	30	300	100	30	50	20	200	500
b) National Exam and Testing System	100	250	300	100	750	0	50	100	50	200	950
Expanded competency testing	50	100	200	50	400	0	50	100	50	200	600
Pilot grade 8/9 and 11/12 exams	50	150	100	50	350	0	0	0	0	0	350
c) Supplies and Equipment Program	900	100	100	100	1,200	500	75	75	100	750	1,950
General education supplies	600	50	50	50	750	300	50	50	50	450	1,200
Science and mathematics kits	300	50	50	50	450	200	25	25	50	300	750
d) Secondary Working Teacher Dev Sche	300	500	300	200	1,300	200	500	100	100	900	2,200
Cascade delivery system	300	500	300	200	1,300	200	500	100	100	900	2,200
e) Existing School Plant Rehab	3,000	200	100	100	3,400	3,000	200	100	100	3,400	6,800
Repair/renovation program	1,500	200	100	100	1,900	1,500	200	100	100	1,900	3,800
Centers of excellence refurbishment	1,500	0	0	0	1,500	1,500	0	0	0	1,500	3,000
f) Selective Building Expansion	2,000	200	400	200	2,800	2,000	200	400	200	2,800	5,600
Village/commune G 1-9 program	1,000	100	200	100	1,400	1,000	100	200	100	1,400	2,800
Selective over-crowded areas	1,000	100	200	100	1,400	1,000	100	200	100	1,400	2,800
g) Selective Scholarships Program	125	125	350	1,600	2,200	0	0	200	5,200	5,400	7,600
Female secondary school scheme	100	100	200	1,000	1,400	0	0	100	3,000	3,100	4,500
UPP graduate teachers scheme	25	25	150	600	800	0	0	100	2,200	2,300	3,100
h) Special Access Studies	0	50	225	75	350	0	0	100	0	100	450
School reorganization study	0	50	150	50	250	0	0	50	0	50	300
Privatization study	0	0	75	25	100	0	0	50	0	50	150
Total	7,575	1,775	2,145	2,655	14,150	6,800	1,330	1,375	6,020	15,525	29,675

E. INVESTMENT PROGRAM: HIGHER EDUCATION

31. *Overview of Higher Education Development Program* The program consists of 9 distinct but inter-linked programs. The long term objective is to enhance the number of appropriately qualified university graduates for the local labor market and further studies, including affirmative action to raise participation of female and poorer rural students. The immediate objective is to improve equity in access and the overall efficiency and effectiveness of higher education provision, including expansion of part-time enrollment and articulation with regional-provincial institutions' programs. A second associated objective is to consolidate and rationalize higher education including articulation with regional/provincial institution's programs. A second associated objective is to consolidate and rationalize higher education management and delivery through a new Higher Education Master Plan. The proposed objectives, performance indicators, outputs and inputs, phased, scaled and costed are shown in the following Program Framework E.

Box 13 Proposed Higher Education Program

Sub-Program	Indicative Cost 1994-2000 (US\$ million)
a) Management and Organization Reform	0.6
b) Delivery System Development	1.9
c) Curriculum and Textbook Program	2.6
d) Exams and Testing Development	0.6
e) Staff Recruitment and Development Program	3.9
f) Foreign Languages Programs	1.2
g) Plant/Equipment Refurbishment Program	2.4
h) Rural/Female Scholarships Program	1.1
i) Financing System Reform and Development	0.3
Total	14.6

Source: Mission (1994), see Program Framework E.

Review of Sub-Programs The individual objectives, targets and implementation modalities of the 9 sub-programs are:

- a. **Management and Organization Reform** The objective would be to strengthen the overall management and organization of higher education, including possible establishment of a single university overseen by a Higher Education Council. The proposed program includes graduate tracer studies, development of a Master Plan and a study of potential for expansion of part-time undergraduate studies. Target date for completion of the Master Plan is end of 1995. The program would be managed by the Directorate of Human Resources, MoEYS through a special local task force. Short term TA is proposed to assist with plan development and studies.
- b. **Higher Education Delivery System Development** The objective would be to strengthen both the management and delivery capacity of selected institutions. A related objective would be to institutionalize a Higher Education Council (HEC) as the policy advisory and quality assurance arm of the MoEYS. Institutional and management development TA would assist in establishing the HEC and providing on-the-job training for senior managers, including a new part-time extension studies unit. Program start-up would be from late 1995/early 1996.
- c. **Curriculum and Textbook Program** One objective would be to revise higher education curriculum consistent with Master Plan needs identification. A second objective is to develop Khmer-language 'core text' in selected faculties. A target is 20 texts by 1997, 50 by 2000. These would be available for purchase by students, along with specialist dictionaries and lexicons. A small task force (an embryonic Khmer Language Institute) would manage this exercise, using individual local/overseas authors and public/commercial publishers. The scope for a 'twinning arrangement' with an international publishing firm would be investigated. Target date for start-up is mid-late 1995.
- d. **Exams and Testing Development** One near-term objective would be to improve the present admission tests for students in 1995/96, through improved test development and computer-marking. A second objective would be to reform and standardize annual and final examinations systems and gradings. Short term TA, including selective use of external moderators for quality control is proposed. Target date for completion is mid/late 1997.
- e. **Staff Recruitment and Development Program** The objective would be to enhance the effectiveness of teaching staff. One measure would be an early staff audit. Strategies include recruitment of expatriate Khmer specialists on long term contracts (via IOM?) and a combination of local and overseas training. A target is recruitment of 15-20 Khmer expatriates p.a. by 2000 with 25% of total staff upgraded by 2000. Short term TA and overseas scholarships programs are proposed. Start-up date would be late 1995. This program would include a rationalization of current overseas training operations and targeting.
- f. **Foreign Languages Programs** The objective would be to improve the cost-effectiveness of present foreign language programs, through a 1995 review. Future envisaged strategies are a focus on training French-English secondary school teachers, possibly via a more commercially-oriented

approach and greater use of short intensive programs for potential overseas trainees. A shift from a 'general' to 'special purposes' approach would be part of the review. Rationalization and selective extension of current aid support, possibly in a modified form, is envisaged.

g. ***Plant/Equipment Refurbishment Program*** The objective would be to assist rationalization of already scheduled assistance (e.g. ADB, France), informed by the 1995 Master Plan. The focus would be renovation not new construction, with an emphasis on 'broad-coverage' equipment for specialist faculties. A second objective would be to construct or renovate dormitory facilities on-campus for women and out-of-city students. The bulk of the refurbishment is planned for the 1997-2000 period.

h. ***Rural/Female Scholarships Program*** The objective would be to assure access for female and needy rural students once tuition fees are introduced. Selection would be on the basis of the grade 11/12 exams and a 'means-test'. A study is proposed for 1995. A target is to support 200 students from each group (400 in total) with a stipend of say US\$200 p.a. for 1996. A special implementation unit would be established.

i. ***Financing System Reform and Development*** The objective is to help establish the management and accounting for a proposed new tuition fee system. An appraisal study is envisaged for late 1995. Follow-up TA to help design and implement an effective accounting system for institutions is proposed. Short term TA for on-the-job training of staff is envisaged. Start-up would be 1996.

1. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To increase the number of appropriately qualified university graduates for the local labor market and in-country and overseas post-graduate studies, including representation from disadvantaged groups.	1.1 increased part-time enrollment (20%) by 2000 1.2 30% females enrolled by 2000 1.3 increased acceptance rate for further studies by 2000 1.4 improved grade classification system by 2000 1.5 improved institutional and employer satisfaction rates 1.6 improved job placement in private sector (cf ADB baseline survey, 1994)	1.1 Annual MoEYS/inst reports 1.2 Annual MoEYS/inst reports 1.3 Annual tracer studies 1.4 Higher Ed Council reports 1.5 Annual tracer studies 1.6 Annual tracer studies	1.1-1.6 inclusive • no radical change in Higher Ed policy • no radical fall in MoEYS budgets • private sector job growth • political support for changes • timely implementation of Master Plan

4. Inputs: Higher Education (Indicative Only)

Sub-Programs	1994-1997 (US\$ '000s)					1998-2000 (US\$ '000s)					Overall Total
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA	Other	Sub-Total	
a) High Ed Mgmt & Organ'n Reform	50	75	275	75	475	0	25	100	0	125	600
Graduate Tracer Studies	0	25	75	25	125	0	25	50	0	75	200
Master Plan Dev Program	50	50	150	50	300	0	0	0	0	0	300
Part-time Extension Prog Study	0	0	50	0	50	0	0	50	0	50	100
b) High Ed Delivery System Dev	175	175	250	150	750	350	300	350	150	1,150	1,900
Higher Ed Council Dev	50	50	150	50	300	0	50	50	0	100	400
Institutional Mgmt Dev Prog	25	75	50	50	200	50	150	200	50	450	650
Extension Services Prog Dev	100	50	50	50	250	300	100	100	100	600	850
c) Khmer Curriculum and Textb'k Dev	300	175	475	175	1,125	550	225	475	225	1,475	2,600
Textbook Dev Prog	200	100	300	100	700	400	100	200	100	800	1,500
Curriculum Dev Prog	50	50	100	50	250	100	100	200	100	500	750
Study Aids Dev Prog	50	25	75	25	175	50	25	75	25	175	350
d) Exam and Testing Reform Prog	75	50	275	25	425	0	25	150	0	175	600
Entrance Test Improvement	25	25	50	0	100	0	0	0	0	0	100
Exams and Grading Systems	50	25	75	25	175	0	25	50	0	75	250
External Moderators Prog	0	0	150	0	150	0	0	100	0	100	250
e) Staff Recruitment and Dev Prog	100	350	750	150	1,350	200	600	1,450	300	2,550	3,900
Khmer Expatriate Program	50	50	600	100	800	100	100	1,200	200	1,600	2,400
In-country Staff Dev	50	100	100	50	300	100	200	200	100	600	900
Overseas Training Prog	0	200	50	0	250	0	300	50	0	350	600
f) Foreign Language Dev Prog	100	250	400	0	750	50	250	150	0	450	1,200
Program Reviews	0	0	50	0	50	0	0	0	0	0	50
French/English Teachers Dev	50	100	250	0	400	0	100	100	0	200	600
Intensive Language Train	50	150	100	0	300	50	150	50	0	250	550
g) Plant Refurbishment Program	500	0	200	100	800	1,200	50	150	200	1,600	2,400
Selective Building/Equipment Renovatio	500	0	100	100	700	1,000	0	100	100	1,200	1,900
Dictionaries Dev Prog	0	0	100	0	100	200	50	50	100	400	500
h) Rural and Female Scholarships Prog	0	0	50	350	400	0	0	100	600	700	1,100
Female Scholarships Prog	0	0	25	175	200	0	0	50	300	350	550
Rural Students Scholarships Prog	0	0	25	175	200	0	0	50	300	350	550
i) Financing System Dev	50	50	100	0	200	0	25	50	0	75	275
High Ed Finance Study	0	0	25	0	25	0	0	0	0	0	25
Management/Accounting Train Prog	50	50	75	0	175	0	25	50	0	75	250
Total	1,350	1,125	2,775	1,025	6,275	2,350	1,500	2,975	1,475	8,300	14,575

F. INVESTMENT PROGRAM: TEACHER EDUCATION

32. **Proposed Overall Program Framework** A program of teacher education reform is proposed consisting of 7 inter-linked but distinct programs. The wider objective is to improve the number and supply of effectively trained teachers through a combination of staff redeployment (linked to down-sizing) and rationalization of current RTTC and PTTC operations. The near/medium term objective is to improve teacher development planning and monitoring, linked to measures for improving equitable access and the efficiency and effectiveness of both pre-service and 'working teacher' training. A specific near term objective will be to enhance access for female and minorities to pre-service training. The objectives, performance indicators, assessment modalities and inputs, phased, scaled and costed 1994-2000 are shown in the Program Framework F. These should be viewed as very indicative, subject to further appraisal and refinement. The program proposed has significant linkages with institutional and management strengthening measures detailed in Section B. The 'working teachers' programs for primary and secondary schools (see Sections C and D) are not duplicated or costed here. The broad targets are repeated for completeness. The exception is foreign language teacher development (both pre-service and 'working teachers') which is detailed in this section but not included elsewhere.

33. **Overview of Proposed Sub-Programs** The indicative program is sub-divided into 8 sub-programs.

Box 14 Proposed Program Framework: Teacher Education Development

Program	Indicative Cost 1994-2000 (US\$ million)
a) TTC Regionalization Program	1.1
b) Teacher Development Planning Systems	0.6
c) Curriculum and Textbook Program	0.8
d) Teacher Career Path and Guidance System	0.4
e) Selective Plant Refurbishment Program	1.7
f) Female/Minorities Scholarships Program	0.7
g) Foreign Language 'Working Teachers' Program	1.4
Total	6.7

Source: Mission (1994), see Program Framework F.

An overview of the objectives, targets and indicators for each sub-program is detailed below:

- a. ***TTC Regionalization and Rationalization Program*** The objective would be to improve matching between teacher supply and demand through rationalization of annual TTC intakes and facilities. The program envisages selective mergers of RTTC/PTTC in Phnom Penh and Kampong Cham into single colleges. National RTTC intakes are 1,000 p.a. (total enrollment 3,000). A total of 6 RTTCs with nation-wide coverage (Kandal, Takeo, Battambang, Prey Veng) is envisaged. A moratorium on PTTCs enrollment until 1997 is proposed, linked to selective conversion of PTTCs into upper secondary schools. This program will be over-arched by proposed education service down-sizing and redeployment plans. Target date for completion is end of 1997. Short term TA to help with planning and organizational development is proposed for 1995-97. A particular thrust in RTTC pre-service foreign language training (say 100 trainees p.a.) is incorporated into this program.
- b. ***Teacher Development Planning Systems*** The objective is to strengthen capability to plan and monitor pre-service and working teacher programs by central HQ. A new Teacher Education Unit is proposed for implementation planning. The target-date for start-up is mid/late 1995. Short term TA for organizational development and staff training is proposed for 1995 onwards. The status and size of the unit would be to subject to regular review based on the planning and scaling of program development in teacher education.
- c. ***Curriculum and Textbook Program*** The objectives would be to strengthen curriculum and textbook development capacity, including relocation of current functions of the Research Institute and Textbook Publications Unit within a Curriculum and Textbook Agency (see Section B). The objectives would be curriculum simplification, planning for the proposed common TTC first year and increased production of trainee and trainer materials. The target is 1 book per trainee per subject and trainer by end of 1996. Short term TA and capital investment is envisaged from early/mid 1995.
- d. ***Teacher Career Path and Guidance System*** The objective would be to establish guidelines for credentialling pre-service and in-service training programs to achieve national uniformity in training. It would be the role of the TEU and Teacher Education Council to determine the nomenclature for pre-service programs and with the assistance of key donors develop a system of credentialling for in-service and graduate programs. This would be particularly important within the cluster school programs and foreign language teacher training. The CBC and ACE would be key agencies for assisting in policy advice for the latter. Target date for completion would late be 1995. Short term TA is envisaged over the proposed period, including monitoring and follow-up.
- e. ***Selective Plant Refurbishment Program*** The objective is to refurbish and re-equip the RTTCs over 1995-97, including provision of 5-10 additional classrooms at Prey Veng. The program would include renovation of student dormitories in the RTTCs. Selective refurbishment of PTTC post-1997 is tentatively programmed, subject to future planning and

policies after the 1997 moratorium. Start-up date for work, subject to buildings audit and rationalization plans, is mid 1995.

- f. ***Female/Minorities Scholarships Program*** The objective is to increase the enrollment of females and minorities in RTTCs. Targets are 40% and 10-15% respectively by 2000. Performance-based (on grade 12 results) scholarships of say USS200 p.a. are proposed for 200 trainees p.a. from each group. Special scholarships implementation units will be established. Short term TA to help targeting and organization of the scheme is proposed. Design phase will be 1995/96, scheme start-up late 1996.

- g. ***Foreign Language 'Working Teachers' Program*** The objective is to enhance access to refresher training for foreign language teachers. A target is 400-500 p.a. 1995/97 and 1,200 p.a. by 2000. The program will be part of the district/cluster model, using RTTCs in vacation time where appropriate. Program start-up will be early 1995. Long term TA for curriculum and materials development, alongside trainer-training is envisaged. This will be linked to the RTTC initiative (under a) and the quality assurance program (under d).

1. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To increase the number and supply of effectively trained primary and secondary school teachers, consistent with enrollment growth projections.	1.1 40,000 primary vacation-time trained by 2000	1.1 Teacher Ed Unit reports	1.1-1.7 inclusive
	1.2 20,000 secondary vacation-time trained by 2000	1.2 Teacher Ed Unit reports	• political support for change
	1.3 3,000 RTTC trainees p.a. from 1995	1.3 Teacher Ed Council reports	• no radical change in enrollment projections
	1.4 moratorium on PTTC enrollment until 1997	1.4 MoEYS annual reports	• redeployment actioned speedily
	1.5 1,000 graduate teacher p.a. by 1998	1.5 UPP annual reports	• teaching staff released for training
	1.6 20% graduate secondary teachers by 2000	1.6 Personnel Dept annual reports	• no radical change in attrition rates
	1.7 MoEYS down-sizing and redeployment from 1995 (cf ADB baseline survey, 1994)	1.7 Min Planning/Audit figures	• no radical fall in education budget

2. Immediate Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve the ministry's capacity to plan, monitor and assure equitable access to and the efficiency and effectiveness of teacher development programs, both pre-service and working teachers.	2.1 Human Resources Directorate estab by 1996 2.2 Teacher Education Unit and Council estab by 1995 2.3 40% female enrollment by 1997 2.4 10 minority teachers by 1997 2.5 cluster/district training network from 1995 2.6 selective RTTC/PTTC mergers from 1995 2.7 reduced per capita training costs from 1995 2.8 working/pre-service training ratio 20:1 by 2000 2.9 improved teacher ed curricula from 1995 2.10 selective improved physical plant by 1997 2.11 teacher/admin staff ratio 5:1 by 1996 2.12 RTTC wages/services ratio 67:33 by 1996 (cf baseline studies ADB, 1994)	2.1 MoEYS annual reports 2.2 MoEYS annual reports 2.3 RTTC annual statistics 2.4 RTTC annual statistics 2.5 Teacher Ed Unit reports 2.6 MoEYS annual reports 2.7 Finance Directorate analyses 2.8 Teacher Ed Unit reports 2.9 RTTC Ed Council reports 2.10 RTTC principals' reports 2.11 RTTC staff lists 2.13 MoEYS annual budgets	2.1-2.10 inclusive: <ul style="list-style-type: none"> • timely MoEYS restructuring • suitably qualified staff appointed • suitably qualified trainees available • no radical drop in RTTC application rates • timely down-sizing of administrative cadres • aid flows sustained • no resistance to rationalization process • foreign languages policy formulated

3.	Outputs	Indicator of Achievement	Quantified/Assessed	Assumptions/Risks /Constraints
3a	Improved Regional RTTC Network	6 RTTCs by 1997; PTTC moratorium	3a-3g inclusive • see 1.1-1.7 • see 2.1-2.12 • MoEYS audit reports • project program reports • Min of Public Audit reports	• as 1.1 -1.7
3b	Improved Teacher Education Planning System	TEU, HRD in place by end of 1995		• as 2.1 - 2.12
3c	Better Curriculum and Textbook Development System	National curriculum framework, end 1995; books by 1996		
3d	Improved Teacher Career Guidance System	TEC estab 1995; career policy by 1996		
3e	Selective Plant Refurbishment Program	6 RTTCs by 1997; remaining PTTCs by 2000		
3f	Female and Minorities Scholarship Program	200 females p.a.; 200 minorities p.a. from 1996		
3g	Foreign Language Working Teachers Program	RTTC enrollment 100 p.a.; 200-250 working teachers trained p.a.		

4. Inputs: Teacher Education (Indicative Only)

Sub-Programs	1994-1997 (US\$ '000s)					1998-2000 (US\$ '000s)					Overall Total
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA	Other	Sub-Total	
a) TTC Regionaliz'n and Rational'n Prog	75	200	425	100	800	50	125	125	0	300	1,100
Organizational dev program	0	50	75	25	150	0	50	50	0	100	250
Staff deployment and training initiative	25	50	150	25	250	25	25	50	0	100	350
RTTC foreign language program	50	100	200	50	400	25	50	25	0	100	500
b) Teacher Dev Planning System	75	75	175	75	400	0	50	125	25	200	600
Teacher Ed Unit inst dev	50	25	75	50	200	0	25	25	0	50	250
Teacher Ed Unit staff training	25	50	100	25	200	0	25	100	25	150	350
c) Curriculum and Textbook Prog	150	75	175	50	450	100	50	125	50	325	775
Curriculum framework/staff orientation	25	50	100	25	200	0	25	50	50	125	325
Teacher ed materials production	125	25	75	25	250	100	25	75	0	200	450
d) Teacher Career Guidance System Dev	50	25	200	25	300	0	0	100	0	100	400
Teacher Ed Council development	25	25	125	25	200	0	0	50	0	50	250
Credentialling system dev	25	0	75	0	100	0	0	50	0	50	150
e) Selective TTC Plant Refurbishment	700	0	175	25	900	700	0	100	0	800	1,700
TTC refurbishment	400	0	75	25	500	400	0	0	0	400	900
RTTC building extension program	100	0	50	0	150	100	0	50	0	150	300
RTTC dormitories program	200	0	50	0	250	200	0	50	0	250	500
f) Female/Minorities Scholarships	50	50	100	200	400	0	0	0	300	300	700
Female RTTC scholarships	25	25	50	100	200	0	0	0	150	150	350
Minorities RTTC scholarships	25	25	50	100	200	0	0	0	150	150	350
g) Foreign Lang Working Teachers Prog	100	500	250	100	950	0	250	100	100	450	1,400
Trainer trainer network dev	50	200	150	50	450	0	100	50	50	200	650
Training delivery	50	300	100	50	500	0	150	50	50	250	750
Total	1,200	925	1,500	575	4,200	850	475	675	475	2,475	6,675

G. INVESTMENT PROGRAM: TECHNICAL-VOCATIONAL EDUCATION AND TRAINING

33. *Proposed Overall Program Framework* An overall program of TVET program reform is proposed consisting of 8 inter-linked but distinct sub-programs. The wider, longer term objective would be to improve the responsiveness of potential public and private training providers to local work force skill and job creation requirements. The near/medium term objective would be to improve government and private sector capacity for training policy and planning, cost analysis, quality assurance and training program monitoring. It is proposed that this overall program be steered by a high level steering group, including finance, planning and audit officials and ministry and private employers' representatives. The objectives, performance indicators, assessment modalities and proposed indicative inputs, phased scaled and costed for 1994-2000, are shown in Program Framework G. These should be regarded as only broadly indicative, subject to further appraisal and refinement. This program represents a 'minimum needs' framework. More detailed proposals, including areas for selective expansion, will be provided within the ADB-financed Skills Development TA.

Box 15 Proposed Program Framework: TVET Development

Program	Indicative Cost 1994-2000 (US\$ million)
• Program Review System Development	0.06
• Master Plan Development	0.14
• Legislation Framework Formation	0.05
• NTS Institutional Strengthening	0.29
• Curriculum Framework Development	0.25
• Human Resource Planning Training	0.11
• Project Management Training	0.18
• Training Investment Fund	5.34
Total	6.42

Source: Mission (1994), see Program Framework G.

- a. ***TVET Program Review System*** The objective would be to establish a system for the on-going review of government and NGO programs, including formulation of indicators of success and sustainability. Short term TA, working with MoEYS staff, would help draw up guidelines to be used by agencies. Individual agencies would finance their own reviews, including conducting tracer studies on program graduates. The target date for completion of the guidelines would be late 1994.
- b. ***TVET Master Plan*** The objective would be to review current and projected TVET policy and plans and make proposals for their future implementation, drawing on the above program reviews. A key component would be to provide a framework for the increased commercialization of this sub-sector, including helping to define the future institutional status, both for financing and management of government TVET institutions and NGO operations. Short term TA is proposed for early/mid 1995.
- c. ***TVET Legislation*** The objective would be to assist government in designing appropriate legislature and regulation frameworks for both public and private providers. This exercise would include advising on the delineation and location of responsibilities of various ministries and the NTS in regulation and quality assurance of training operations. Target date for completion is mid/late 1995.
- d. ***National Training Secretariat: Institutional Strengthening*** The objective would be to strengthen the NTS (or an equivalent body) to establish a labor market information system, including employment and wage trends, monitoring training output and undertaking training needs analysis and impact surveys. An early task would be to conduct a training needs survey for the private sector. Short term TA, linked to institutional development and staff training is proposed. Target date for completion would be end of 1996.
- e. ***TVET Curriculum Framework*** The objective would be to establish principles and guidelines of the design and accreditation of training programs in key occupational areas, working alongside employers. A first tranche of curricula would be completed by end of 1997, a second phase by 2000. Short term TA, focusing on local staff training, is proposed.
- f. ***Human Resource Planning Training*** The objective would be to design and deliver short course and on-the-job training for a cadre of human resource planners in key ministries. The aim would be to assist improvement of capabilities for planning supply-demand for trained personnel, and undertake training needs analysis and training plans. Short term TA is proposed. The target would be to train 40 planners by early 1996.
- g. ***Project Management Training*** The objective would be to generate a cadre of senior/middle level project managers from both government and local/international NGOs. The target would be to train 50 p.a. over the next three years. Short term TA is proposed to assist with program design and some delivery. Target date for completion, end of 1996.
- h. ***Training Investment Fund*** The objective would be to help stimulate a private market in training provision and, simultaneously, supplement training requirements within on-going aid and private investment programs. The terms of reference for the fund would include a focus on employment creation linked to training, financial credits for private investors in setting up private training schools and manufacturing/training units. The fund management would rest in the ministry of finance and planning, with advice from other line ministries. Medium term TA is proposed to help establish investment guidelines and systems. Target date for start-up is early 1996, with disbursement from 1997 onwards.

I. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve the responsiveness of public and private TVET providers to Cambodian work-skills and job creation requirements, including increased participation of the private sector.	1.1 50% private providers by 2000	1.1 MoF/MoP/MoEYS annual reports	1.1-1.9 inclusive
	1.2 75% private sector enrollment by 2000	1.2 NTS annual reports	• no radical change in commercialization policy
	1.3 75% employer/trainee cost-share by 2000	1.3 NTS, MoF/P annual surveys	• active cooperation from private investors
	1.4 25% increase in applicants by 2000	1.4 Institutions' annual reports	• effective TVET-employment linkage
	1.5 25% government cost share by 2000	1.5 MoF/P, NTS surveys	• speedy enactment of TVET legislation
	1.6 increased employer and trainee satisfaction by 1997	1.6 NTS-run sample surveys	• no radical fall in aid flows
	1.7 increased job placement rates by 1998	1.7 NTS/institution tracer studies	• effective marketing for potential investors
	1.8 manufacturing TNA and tracer studies in designs	1.8 MoF/P guidelines	• TVET tax-incentives effective
	1.9 estab Training Investment Fund by 1997	1.9 MoF/P annual reports	
(cf ADB baseline survey, 1994)			

2. Immediate Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve government and private sector capacity for TVET policy development, training planning, cost-analysis, quality assurance and effectiveness of monitoring.	2.1 Employers Consultative Forum for 1995	2.1 MoF/P annual report	2.1-2.10 inclusive: <ul style="list-style-type: none"> • effective employer cooperation • effective staff recruitment • qualified staff available • timely actions by MoEYS, MoF/P • aid finance forthcoming • speedy TVET policy development • timely definition of NTS functions
	2.2 improved labor market information systems for 1996	2.2 NTS/MoEYS/MoF/P reports	
	2.3 150 local project managers trained by 1997	2.3 project reports	
	2.4 estab ministries' HRD planning units by 1995	2.4 Annual ministry and public audit reports	
	2.5 TVET programs review system in place by 1995	2.5 MoF/P annual reviews	
	2.6 TVET curriculum framework in place by 1995	2.6 MoEYS, NTS reports	
	2.7 private sector training needs analysis by 1996	2.7 NTS, consultant reports	
	2.8 TVET program/staff accreditation system by 1997	2.8 NTS, MoEYS reports	
	2.9 complete TVET institutional legislation by 1995	2.9 Parliamentary reports	
	2.10 defined location and formation of NTS by 1995	2.10 MoEYS/MoF/P reports	
(cf baseline studies ADB, 1994/95)			

3.	Outputs	Indicator of Achievement	Quantified/Assessed	Assumptions/Risks /Constraints
3.1	Improved TVET Program Evaluations	Begin 1994; completed by 1996	3.1-3.13 inclusive	3.1-3.13 inclusive
3.2	Estab Labor Market Information System	In place by 1997/98	• as 1.1 - 1.9	• as 1.1-1.9
3.3	Estab Program Review System	In place from 1995	• as 2.1 - 2.10	• as 2.1-2.10
3.4	Bi-annual Training Needs Analysis	First outputs in 1995 (private sector)	• Consultant's reports	
3.5	TVET National Curriculum Framework	First phase; 1996; second phase 1998	• Agency program reviews	
3.6	Program Accreditation Systems	First phase; 1996; second phase 1998	• NGO program reviews	
3.7	New TVET Institutional Legislation	Completed by end of 1995	• NTS monitoring surveys	
3.8	TVET Quality Assurance System	Begins operations 1995, estab 1997	• HRD units surveys and reports	
3.9	Public-private Employers consultative Forum	In place, end of 1995	• Program mid-term reviews	
3.10	Cadre of Trained Project managers	50 p.a. trained by 1995/96/97		
3.11	Cadre of Trained HRD Planners	40 trained by end of 1996		
3.12	Diversified TVET Providers	50% private by 2000		
3.13	Diversified TVET Graduates	75% private by 2000		

4. Inputs: Technical/Vocational Education (Indicative Only)

Sub-Programs	1994-1997 (US\$ '000s)					1998-2000 (US\$ '000s)					Overall Total
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA	Other	Sub-Total	
a) Program Review System	0	20	30	0	50	0	0	10	0	10	60
b) Master Plan Development	20	30	60	0	110	0	10	20	0	30	140
c) Legislation Framework Formation	0	10	40	0	50	0	0	0	0	0	50
d) NTS Institutional Strengthening	30	40	90	0	160	30	40	60	0	130	290
e) Curriculum Framework Dev	0	20	90	0	110	30	20	90	0	140	250
f) Human Resource Planner Training	20	20	40	0	80	0	10	20	0	30	110
g) Project Management Training	20	20	90	0	130	10	10	30	0	50	180
h) Training Investment Fund	20	10	150	1,000	1,180	0	10	150	4,000	4,160	5,340
Total	110	170	590	1,000	1,870	70	100	380	4,000	4,550	6,420

H. INVESTMENT PROGRAM: NON-FORMAL EDUCATION

34. **Proposed Non-formal Education Program Framework** The longer term development objective would be to improve the education attainment of the adult population, especially literacy rates and overall years of schooling. The near term objective would be to undertake a literacy status report, prepare a detailed sector plan and establish institutional capacity for non-formal education program expansion. The medium term objective would be to strengthen management, implementation planning and delivery capacity for literacy and complementary studies programs, targeted at disadvantaged rural areas, including women. The objectives, performance indicators and verification techniques and conditionalities are shown in the Program Framework H.

35. **Overview of Proposed Sub-Programs** The indicative program is provisionally sub-divided into 6 inter-linked but discrete programs.

Box 16 Proposed Program Framework: Non-Formal Education

Program	Indicative Cost 1994-2000 (US\$ million)
a) Literacy Survey(s)	0.36
b) Non-formal Education Master Plan	0.08
c) Institutional Strengthening	0.25
d) Management Network	0.33
e) Literacy Program Expansion	2.15
f) Complementary Studies Expansion	1.85
g) Girls' Complementary Schools Re-entry Scholarships	5.70
Total	10.72

Source: Mission (1994), see Program Framework H

An overview of sub-programs objectives, management and implementation arrangements and target dates is summarized below:

a. **Literacy Surveying** The objective would be to sample survey literacy rates for 10% of the adult population, using a network of NGO field workers coordinated by a semi-formal government-NGO forum. This survey would be managed by the forum, including evaluations of the on-going pilot programs. Target date for completion would be mid-1995.

- b. ***Non-formal Education Master Plan Development*** The objective would be to develop a master plan for the expansion and financing of literacy and complementary studies programs, including optimum utilization of current school buildings and staff. The exercise would be managed by the government-NGO forum. Target date for completion would be mid/late 1995, possibly linked to the survey exercise.
- c. ***Non-formal Education Institutional Strengthening*** The objective would be to enhance capacity for the planning, management and delivery of non-formal education programs, through establishment of appropriate institutional arrangements. The master plan would examine the viability of establishing a semi- or fully-autonomous Center for Non-formal Education. Short term TA would be provided to help establish necessary capability. Target date for establishment and operational start-up would be mid-1996.
- d. ***Non-formal Education Management Network*** The objective would be to establish a network of 7-10,000 village coordinators for non-formal education activities. A phased-down monthly honorarium would be provided with increased cost-sharing from the community. Short term training would be provided at district resource centers. Target date for start-up would be early 1996.
- e. ***Expansion of Literacy Program Access*** The objective would be to expand access to 7-10,000 villages using a range of strategies designed with community participation. The target date would be start-up in late 1996. The program would provide initial start-up student and teacher guides, including introduction of a small charge for services. Target group would be 20-35 year olds. This would be complemented by a monthly newsletter and radio broadcasts. Target output would be 0.5 million from 1997/98.
- f. ***Expansion of Complementary Studies*** The objective would be to expand access to primary and secondary school. Complementary studies programs aimed at younger out-of-school youth (15-25 years) and motivated older students. The program would include payment of tuition fees (possibly subsidized at first), within a regulatory framework designed by MoEYS. Target output would be 0.5 million graduates p.a. from 1997/98 at all levels. Each of the programs would require detailed design and appraisal. The proposals represent broad strategic directions and indicative costings.
- g. ***Girls' Complementary School Re-entry Scholarships*** The objective would be to provide special incentives for girls from poor rural families to re-enter complementary primary and secondary schooling. A small stipend covering books and supplies (say \$5 p.a.) would be provided, subject to attendance and performance. Target is 300,000 girls p.a. Target start-up date 1997.

1. Wider Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve the overall education attainment profile of the population and reduce inequities for disadvantaged groups, especially women.	1.1 increase literacy rates by 50% by 2000 1.2 increase adults' years of schooling by 50% by 2000 1.3 reduce gender disparities by 25% by 2000 1.4 0.5 million p.a. literacy participants from 1997 1.5 0.5 million p.a. complementary students from 1997 (cf ADB baseline survey, 1994)	1.1 Literacy survey, 2000 1.2 Min of Planning survey, 2000 1.3 Min of Planning survey, 2000 1.4 NFE Center annual reports 1.5 NFE Center annual reports	1.1-1.5 inclusive • effective mobilization campaign • access strategies effective • no radical change in MoEYS policy • safety in rural areas • donor finance forthcoming
2. Immediate Objective	Indicators of Achievement	Quantified/Assessed	Assumptions/Risks/Constraints
To improve government and community/NGOs' capacity of policy, planning, management, financing and delivery of literacy and competency studies, especially in disadvantaged rural areas.	2.1 NFE Master Plan by mid-1994 2.2 Nation-wide GoC/NGO delivery network by end 1995 2.3 Autonomous Center for NFE (CNFE) by end 1995 2.4 NFE inspectorate/management system by end 1995 2.5 27,000 'double-shift' NFE teachers from 1996 2.6 12,000 NFE village coordinators by 1996 2.7 one NFE guide per student and teacher from 1997 2.8 weekly/monthly education newsletter from 1996 2.9 weekly NFE broadsheets by 1997 2.10 25% community cost-share by 2000 (cf baseline studies ADB, 1994/95)	2.1 MoEYS annual report 2.2 MoEYS, CNFE annual report 2.3 MoEYS annual report 2.4 MoEYS annual report 2.5 CNFE coordinator's report 2.6 CNFE coordinator's report 2.7 CNFE/donor agency surveys 2.8 CNFE annual reports 2.9 MoEYS annual reports 2.10 CNFE annual reports	2.1-2.10 inclusive: • 'double shift' teacher system effective • salary incentives sustainable • speedy MoEYS reorganization • effective staff selection and training • timely production of materials • effective NGO cooperation/networking • radio/newspaper company cooperation • no radical decline in rural incomes • appropriate govt salary incentives for successful graduates

3.	Outputs	Indicator of Achievement	Quantified/Assessed	Assumptions/Risks /Constraints
3.1	Sample Literacy Survey	Completed by MoEYS, mid-1995	3.1-3.11 inclusive	3.1-3.11 inclusive
3.2	NFE Master Plan	Completed by MoEYS mid/late 1995	<ul style="list-style-type: none"> • MoEYS annual reports • Dir-Gen annual reports • Inspec-Gen reports • CNFE reports • NGO field reports • Provincial Offices's reports • Interim monitoring reports • Consultancy reports • Annual sample/impact survey 	<ul style="list-style-type: none"> • as 1.1-1.5 • as 2.1-2.10
3.3	Estab Center for Non-formal Ed	Staff in place, end 1995		
3.4	Improved NFE Quality Assurance System	NFE Inspectorate in place, 1995		
3.5	Improved NFE Staff Utilization System	50% MoEYS on NFE 'double-shift' by 1997		
3.6	Better Plant Utilization System	100% inc in classroom utilization rates by 1998		
3.7	NFE Materials Production System	Capacity: 0.5 million graduates p.a.		
3.8	Trained NFE Teacher Cadre	100% NFE-trained staff by 2000		
3.9	Trained NFE Coordinator Cadre	5,000 (1996), 10,000 (2000)		
3.10	Annual Literacy Graduates	0.5 million p.a. from 1998; 60% women		
3.11	Annual Complementary Studies Graduates	0.5 million p.a. from 1998; 60% women		

4. Inputs: Non-Formal Education (Indicative Only)

Sub-Programs	1994-1997 (US\$ '000s)				1998-2000 (US\$ '000s)				Overall Total		
	Capital	Training	TA	Other	Sub-Total	Capital	Training	TA		Other	Sub-Total
a) Literacy Survey/Evaluation	50	50	60	50	210	20	20	60	50	150	360
b) NFE Master Plan	0	0	40	20	60	0	0	20	0	20	80
c) NFE Institutional Strengthening	80	20	60	20	180	10	20	30	10	70	250
d) NFE Management Network	100	100	40	0	240	0	50	40	0	90	330
e) Literacy Program Development	750	100	100	0	950	1,000	100	100	0	1,200	2,150
f) Complementary Studies Expansion	750	100	100	0	950	750	100	50	0	900	1,850
g) Girls' Complementary Sch Scholarship	0	0	1,500	0	1,500	0	0	0	4,200	4,200	5,700
Total	1,730	370	1,900	90	4,090	1,780	290	300	4,260	6,630	10,720

I. IMPLEMENTATION, MANAGEMENT AND BENEFIT MONITORING: MODALITIES

Matching Policies, Strategies and Investment Programming

36. **Basic Education: A Greater Aid Share** Consistent with government's stated policies and priorities, the investment package proposes an increased share of development spending for 'basic education'. The current education investment program 1994-96 (see World Bank, 1994) devotes roughly 30% of education aid for basic education. As Figure 1 illustrates, this investment program provides roughly 67% for 'basic education', including primary, lower secondary, literacy and complementary schooling programs. The share for higher education (including pre-service teacher education) is 14% compared to 40% in the 1994-96 program. The broad message to donors and government is that a greater share of aid (and government's own development expenditure) should be targeted at the lower levels of education where social returns are greatest. *Investment patterns need to match stated policies and priorities, including a greater share of development expenditure for basic education.*

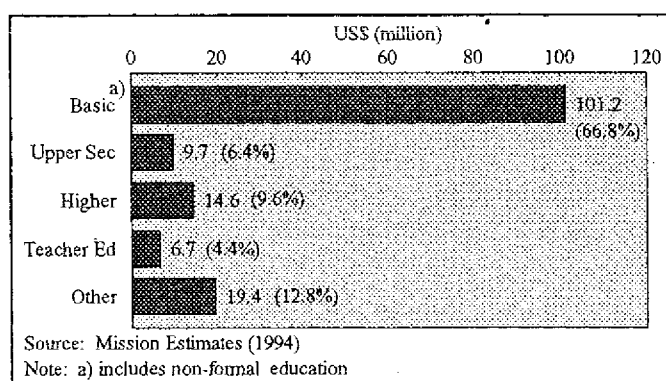


Figure 1 Proposed Aid Investment by Level: 1994-2000

37. **Quality Revitalization: An Aid Priority** MoEYS policy statements (e.g. 'Rebuilding Quality Education, 1994) highlight the priority given to quality revitalization at all levels. Quantitative gains in enrollment should not be at cost to improvement and maintenance of educational standards. The nature and type of investments should match these priorities. This argues for a high share of investment in textbooks, improvement in instructional hours, teacher training and management development. This investment package is categorized by type in Annex I. As Figure 2 illustrates, this investment program proposes an allocation of roughly two thirds for quality improvement measures, including school building rehabilitation and merit-driven scholarships. This aid package takes account of the need for programming with 'low recurrent cost implications' in the

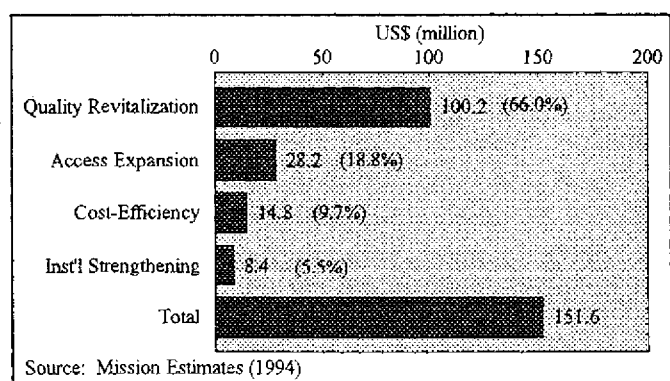


Figure 2 Proposed Aid Investment: by Objective, 1994-2000

medium term 1994-2000. This approach will allow government some 'breathing space' to increase the share of its own recurrent and development expenditure for education. *Government and aid investment in education should provide a high share for low recurrent cost, quality improvement programs.*

38. More Spending on Instructional Materials

The sector study highlights the low proportion of government expenditure on instructional materials, especially textbooks. In the medium term, the study proposes that aid spending should help 'fill the gap'. In the longer term, government needs to devote an increased share of its own spending for books and teaching aids. This principle should be reflected in the investment package. Figure 3 shows the proposed

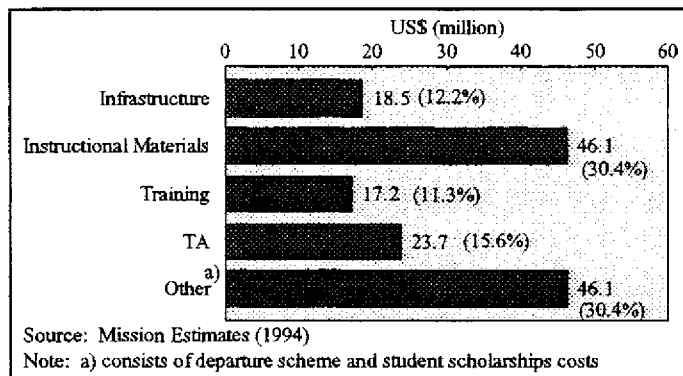


Figure 3 Proposed Aid Investments: 1994-2000, by Type

investment package by type. An important feature is the heavy emphasis on instructional materials (US\$46 million) which are key determinants of quality revitalization. The training component (11.0%) is understated since much of the TA will have on-the-job training responsibilities and nearly two-thirds of the 'other' category is in-country education/training scholarship stipends for disadvantaged students. The overall 'training' package amounts to roughly 30% (US\$45-50 million) of the overall investment package. *An aid priority should be more spending on instructional materials and training programs.*

39. Increasing Government's Share on Education Development Expenditure

As outlined in the sector study, government is heavily reliant on external aid for both recurrent and development support. To sustain the necessary quality improvement measures and selective expansion of services, a minimum education annual recurrent budget of R120 billion by 2000 is proposed. Many of the current 'capital' items (e.g. school building, textbooks) need to be included in

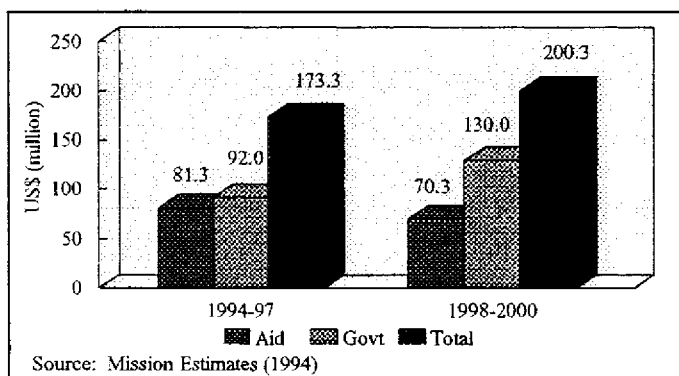


Figure 4 Government-Donor Share: Education Development Spending 1994-2000

future recurrent budgets for book replacement and building and operational maintenance. As detailed in the sector study, a projected local recurrent provision of R230 billion (US\$92 million, 1994 prices) for the period 1994-97 is needed. For the period 1998-2000, R325 billion (US\$130 million) is projected. As Figure 4 shows, these projections represent an increased share of education expenditure by government from 53% (1994-97 period) to 65% (1998-2000). *Sustainability of education development will require an increased education spending share over the period 1994-2000.*

Managing the Proposed Education Investment Program

40. *Adopting a Programmatic Approach*

A critical theme of the sector study is a focus on a 'programmatic' approach to education investment. Government, with donor support, should be pro-active in reducing the tendency to manage and implement aid through small discrete 'projects'. A proliferation of small projects undermines effective aid coordination, duplicates costly aid management and implementation units and reduces the likelihood of aid investments meshing with overall policy frameworks.

Box 17 The Need for a Programmatic Approach to Investment in Education

With the prospect of increased investments in education from the European Union, USAID, Asian Development Bank and the World Bank, the need to adopt a programmatic approach is pressing.

Source: Mission (1994)

41. *An Investment Framework for Basic Education*

In June 1994, government sought ADB assistance in preparation of an overall investment program for basic education. A program preparation technical assistance (PPTA) is scheduled for September-November 1994. This represents a model for planning similar investments for other sub-sectors in the future. The proposed PPTA will help government to finalize the overall policy and strategic framework for basic education (grades 1-6 as the first phase), ensure program plans are consistent with the overall framework and devise cost-effective management and benefit monitoring procedures (Box 18). Scheduled support from the ILO and ADB will likely assist in developing a similar program for technical-vocational education. The sector study proposes TA for the development of a Higher Education

Box 18 Basic Education: ADB-PPTA Objectives, 1994

- confirm policy and strategic framework
- detail objectives, structures and resources
- prepare strategies for primary education development
- prepare overall investment plan for primary education
- develop operational programs of action
- assess management and absorptive capacity for investment
- prepare benefit monitoring and evaluation plans

Source: Government-ADB Memorandum of Understanding, 1994

TA for the development of a Higher Education Master Plan and investment package. *Overall investment programs are required for each sub-sector. ADB support for a Basic Education, Phase I program is a useful model. TA for investment programming should be a priority for donor support.*

42. *Programmatic Approach: Benchmark Information*

A program approach requires particular emphasis on the collection, collation and analysis of benchmark (baseline) data ('Benefit Monitoring and Evaluation Handbook' ADB, 1992). Such data should include school mapping information, buildings conditions audits, staff audits and efficiency and financing studies (Box 19). This information is critical to program planners in the phasing, scaling and costing of programs. It is vital

to managers and monitoring teams in assessing whether program targets and objectives are being met. The program frameworks in sections B-H provide an initial basis for this approach, subject to adjustment as government-donor dialogue proceeds and aid schedules are prepared. *Sub-sectoral investment programs should be preceded by comprehensive benchmark data analysis.*

43. Program Approach: Pre-PPTA Studies

Broad-based baseline data is crucial in preparation of 'program' based investment planning. The data will be used by individual donors in preparation and appraisal of sub-programs or projects. The proposed pre-PPTA studies in advance of the ADB-financed Basic Education PPTA represent a useful model for other sub-sectoral investment programs (Box 20). A range of studies are envisaged covering selective school mapping, school building conditions audits, PTTC/RTTC staff and buildings audits, alternative 'working teacher' training delivery systems, education for minorities and organizational development plans for curriculum, textbook and examinations units. Much of this data, including operational costs, could have useful 'spin-off' for other sub-sectoral plans.

Alternative Management and Implementation Structures

44. Some Alternatives: Implementation Structures

Uncertainties over the future organization and management structure of MoEYS make it problematic in formulating effective implementation structures for the proposed investment program and projects. Structures will also be affected by the nature of individual projects and the requirements of particular funding agencies (Box 21). Nevertheless some broad principles are suggested. Firstly, a focus on a 'program' approach argues for the establishment of a single Program Implementation Unit (PIU) to provide for better coordination of sub-programs and cost-efficient delivery of cross-cutting functions (e.g. procurement, accounting, staff development). Individual sub-program responsibilities could be delegated to various

Box 19 Benchmark Information: Some Modalities

- Preparation of School and Staff Audits
- Socio-Economic and Beneficiary Surveys
- Socio-Technical Profiles and Analysis
- Rapid Reconnaissance Sample Surveys
- Statistical Digests and Surveys
- Preparation of Program and Project Frameworks
- Conducting Pre-PPTA Studies

Source: ADB, Benefit Monitoring and Evaluation Handbook, 1992

Box 20 Basic Education: Pre-PPTA Activity

- Primary and Lower Secondary Mapping
- School Buildings Audits
- Education Service Staff Audits
- PTTC/RTTC Audits
- Alternative 'Working Teacher' Training Models
- Education for Minorities Plans
- Semi-Autonomous Education Support Unit Plans
- Baseline Program Planning Data
- Phased, Scaled and Costed Operational Plans

Source: ADB TA documents, 1994

types of units, including HQ line directorates or departments, provincial-district offices, semi-autonomous implementation units, (e.g. support agencies) or school-parents committees.

45. *Some Alternatives: Management Structures*

MoEYS organizational uncertainties make it equally difficult to formulate an investment program management structure. As several sub-sectoral investment programs emerge there may be a case for an over-arching single Program Management Unit (PMU) to manage and coordinate the total investment program. There is an argument for a high degree of management autonomy to ensure speedy decision-making and aid disbursement. Management authority could be delegated to the proposed autonomous agencies as an aid channel for specific program components. In some instances, donors may provide aid-financed

managing agents (located inside or outside line directorates) consistent with their own management, reporting and accounting procedures. A critical requirement will be clear lines of delegated authority to field management units and implementation agencies, including provincial directorates, appointed NGOs and community groups.

46. *Optimizing the Use of Technical Assistance*

The proposed investment program, especially for the management development components, includes a significant proportion of technical assistance. Government will need to consider carefully how to optimize use of proposed technical assistance. Each instance will need to be examined on a case by case basis, but some guidelines may be helpful (Box 22). The overall message is to focus on short term assistance, with monitoring and follow-up rather than long term TA. The latter approach often creates a dependence and assumption of line functions. A second consideration should be clear definition of TA objectives, time frames and targets rather than 'general' terms of reference. A third consideration is TA delivery modes, including use of 'twinning' arrangements with other Asian,

Pacific Rim and metropolitan education ministries to provide institutional memory and linkages. In

Box 21 Alternative Implementation Structures

- Central HQ Program Implementation Unit (PIU)
- New Procurement, Accounting and Training Units
- Use of Existing Line Directorates
- Creation of New Education Support Units
- Provincial-District Based PIUs
- New School-Parents Community Units

Source: Mission Commentary, 1994

Box 22 Optimizing Use of Technical Assistance

Strategies will vary on a case by case basis. Consideration should include:

- focus on short term quick-impact systems planning
- cautious use of long term TA except where crucial
- well-defined objectives, targets and time-frames
- avoid use of very 'general' terms of reference
- short, regular, follow up TA missions bring benefits
- use of institutional/ministry twinning
- consideration of well-qualified Khmer expatriates

Source: Mission Commentary, (1994)

Cost-Efficiency	1994-97	1998-2000	Total
MoEYS Staff Rationalization	11,500	20	11,520
School Mapping Audit and Legislation	430	125	555
Internal Efficiency Study	275	125	400
Community Mobilization Study	200	100	300
Special Access Studies	350	100	450
Financing System Dev	200	75	275
TTC Regionaliz'n and Rational'n Program	800	300	1,100
Program Review System	50	10	60
TVET Master Plan Development	110	30	140
Sub-Total	13,915	885	14,800
Institutional Strengthening			
MoEYS Restructuring Program	525	145	670
Education Management Info Systems	555	310	865
Line Directorate Capacity Building	370	260	630
Strengthening Support Agencies	1,620	1,380	3,000
Aid Management Strengthening	270	140	410
High Ed Mgmt & Organ'n Reform	475	125	600
Teacher Dev Planning System	400	200	600
Legislation Framework Formation	50	0	50
Human Resource Planner Training	80	30	110
Project Management Training	130	50	180
Literacy Survey/Evaluation	210	150	360
NFE Master Plan	60	20	80
NTS Institutional Strengthening	160	130	290
NFE Institutional Strengthening	180	70	250
NFE Management Network	240	90	330
Sub-Total	5,325	3,100	8,425
TOTAL FOR OVERALL INVESTMENT	80,810	70,865	151,675

Medium Term Education Development: Indicative Policy and Strategic Directions 1994-2000

A. Basic Education (Grades 1-6, 7-9)

Quality Improvement The priority objective by 2000 is to achieve full completion rate for the grade 1-6 cohort and significant gains in the 7-9 cohort, linked to overall 40% gains in student competencies. Key strategic directions include:

- provision of 1 book per student per subject (grades 1-6) 1997, grades 6-9 by 1998, where necessary with commercial assistance
- performance based special incentives (salary, training) for head teachers
- introduction of minimum 24 hours per week instruction time, 6 day week, 38 week school year
- establishment of vacation-time, district-based in-service teacher training network by 1996, operational 1997
- gradual introduction of National Supervisory/Inspection Unit, complete by 2000, 90% district-based
- moratorium on pre-service training until 1997, linked to education service down-sizing from 1995 onwards
- reduction in under-qualified teachers, linked to down-sizing and training provisions
- increased provision of equipment and teaching aids, including limited specialization (e.g. science) in grades 7-9
- introduction of a National Examinations Board from 1996, including grade 1, 4, 6 and 9 competence and selection tests
- selective refurbishment of primary and lower secondary schools (or consolidations), target 3,000 p.a. until 2000
- wages : services ratio of 75 : 25 by 1997; 67 : 33 by 2000, linked to down-sizing and teacher salary rises
- minimum 65-70% of donor assistance for grade 1-9 quality improvement

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- nation-wide establishment of some all-through grade 7-12 schools, through selective LSS/USS consolidation
 - selective rehabilitation of under-utilized LSS 'basic' and all-through schools
 - equitable enrollment of girls, target 40% by 2000
 - selective development of grade 7-12 boarding schools in remote and minority areas
 - female scholarships schemes for secondary and higher education

Cost-Efficiency Key strategic directions include:

- regulation of staffing norms (basic 1:60; LSS 1:35, USS 1:25)
- regulate classroom pupil ratios (overall basic/secondary 1:60)
- establish minimum size schools (300: 10 classes: 25-35)
- curriculum simplification (6 'core' subjects: basic, LSS, USS)
- foreign languages in grades 10-12, linked to tuition fees

Mobilization of Additional Resources Key strategic directions will be informed by a small-scale TA, including examination of mechanisms for community mobilization and cost-sharing in upper secondary schools. Options include:

- introduction of greater cost-recovery (say 50%) in grades 10-12
- consolidation of community contributions into PTA fund mechanisms
- encourage privatization of secondary schooling in some urban areas
- 10% of aid for upper secondary schooling

C. Higher Education

Rationalization and Consolidation The prime policy objective will be to strengthen the management and organization by 1997. Key strategic directions include:

- finalization of Higher Education Master Plan by 1995
- establish a Higher Education Council, including public/private employers by 1996
- greater institutional autonomy, including financial, by 1997/98

- consolidation under a single organization/management structure by 1997/98
- short-term full-time enrollment down-sizing, linked to part-time expansion of access
- abolition of the preparatory year from 1995/96
- rationalization of programs, plant, staff, informed by the Master Plan
- expanded access for disadvantaged groups, linked to performance-based scholarships started at provincial model schools, including PTTC conversions

Improved Quality and Effectiveness

- merit-driven admissions based on grade 12 results from 1996, linked to strict reporting of student performance
- Khmer used as language of instruction by 1998
- short term, pre-entry, undergraduate intensive French/English 1995-1997
- accelerated translation of core texts into Khmer, period 1995-2000
- staffing moratorium, including expatriate Khmer recruitment on long term contracts
- wages : service ratio 67 : 33 by 1998
- expansion of faculty 'twinning links' (South Asia/Pacific Rim)

Cost-Efficiency The policy objective should be to optimize use of public expenditure on higher education. Key strategic directions include:

- strict regulation of staff workloads and attendance from 1995
- expansion of part-time and distance learning/correspondence from 1998, informed by TA study
- improved productivity of administrative and service worker cadres from 1995, linked to training
- privatization of selected services from 1996

Mobilization of Additional Resources The policy objective should be to enhance cost-sharing in higher education; target 75% private by 2000. Key strategic directions include:

- introduction of fixed annual student charges from 1996 through commercial bank accounts, linked to scholarships for less well-off students

- donor/government scholarships scheme for 'needy' students; selected by 'merit' via HEC committee
- private business sponsorship scheme of individual faculties and students; linked to tax incentives
- max 10% donor assistance for HEd.; focus on books, equipment, on-the-job staff training, TA

D. Non-Formal/Technical-Vocational Education

Strengthening Labor Market Responsiveness The prime policy objective is to ensure that NFE/TVET programs match labor market requirements. Key strategic directions include:

- establish autonomous National Training Board by 1995
- review of public funding of TVET institutions, linked to employer Task Force evaluation by 1995
- improved commercialization of TVET institutions, selective sales as combined factory/workshop and training institutions
- tax incentives to local/foreign companies to take over selected TVET institutions as factories/training schools
- introduction of TVET trainee accreditation system (via NTB) by 1996
- introduction of 'contracted' training, through public and private training schools from 1996
- establish regulatory and quality control mechanisms (via NTB) from 1996
- max 10% of donor assistance to TVET/NFE; focus TA only

E. Institutional Development

The prime objective is to rationalize the functions of MoEYS HQ and provincial/district management, enhance public accountability throughout and increase the autonomy of selected functions/institutions. A critical requirement will be to assure consistency with overall Civil Service Reforms. Key strategic directions include:

- rationalize HQ functions into Strategic Policy/Planning, Aid Coordination Secretariat; Finance/Accounting, Personnel/Staff Development, Inspectorate, Monitoring/Audit from 1995
- establish selected autonomous institutions; Exams Board; Curriculum/Textbooks Agency; School Construction Agency; Teacher Education Board; Higher Education Council from 1995

- autonomous bodies become 'cost-centers', including part government contribution and revenue earning powers (e.g. donor project management fees); with separate TA-assisted project implementation units from 1995/96
- establish National Education Advisory Council with policy advisory functions to Minister from 1995
- establish Donor Coordination Group, reporting to Aid Coordination Committee for 1994/95
- donor finance channelled via autonomous agencies' management/accounting systems, with TA support
- establish National Parents Teachers Association with provincial, district, commune, village boards by 1996
- indicative sizes: HQ functions (excl Inspectorate): 100; Inspectorate: 350; provinces/districts: 200; autonomous agencies: 150
- autonomous institution and HEd staff on 2 year 'rolling contracts'; set own salary scales from 1996
- introduce annual staff appraisal systems: HQ/autonomous institutions/HEd for 1996
- all new education service recruits on 1/2 year contracts from 1995