

ASIAN DEVELOPMENT BANK

RRP: NEP 32236

**REPORT AND RECOMMENDATION
OF THE
PRESIDENT
TO THE
BOARD OF DIRECTORS
ON A
PROPOSED LOAN
TO THE
KINGDOM OF NEPAL
FOR THE
TEACHER EDUCATION PROJECT**

August 2001

CURRENCY EQUIVALENTS

(as of 15 August 2001)

Currency Unit	=	Nepalese Rupees (NRs)
NRe1.00	=	\$0.013
\$1.00	=	NRe74.841

For the purpose of calculations in this report, an exchange rate of \$1.00=NR74.928 was used. This was the rate generally prevailing at the time of project appraisal.

ABBREVIATIONS

ADB	-	Asian Development Bank
BME	-	benefit monitoring and evaluation
BPEP II	-	Basic Primary Education Program II
CTA	-	chief technical adviser
Danida	-	Danish International Development Assistance
DE	-	distance education
DEC	-	Distance Education Center
DEO	-	district education officer
DFID	-	Department for International Development
DOE	-	Department of Education
EIRR	-	economic internal rate of return
EMIS	-	education management information system
FOE	-	faculty of education
GDP	-	gross domestic product
HSS	-	higher secondary school
JICA	-	Japan International Cooperation Agency
MGT	-	multigrade teaching
MOES	-	Ministry of Education and Sports
MOF	-	Ministry of Finance
NCED	-	National Center for Education Development
NPC	-	National Planning Commission
PEDP	-	Primary Education Development Project
PTTC	-	primary teacher training center
RC	-	resource center
SLC	-	school leaving examination
SOE	-	statement of expenditure
TA	-	technical assistance
TMIS	-	teacher management information system
TMCC	-	training management and coordination committee
TOT	-	training of trainers
UNDP	-	United Nations Development Programme
UNICEF	-	United Nations Children's Fund
VDC	-	village development committees

NOTES

- (i) The fiscal year (FY) of the Government ends on 15 July.
- (ii) In this report, "\$" refers to US dollars.

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LOAN AND PROJECT SUMMARY

Borrower	Nepal
Project Description	<p>The Project is a follow-up to the Asian Development Bank's (ADB's) first Primary Education Development Project, and aims to establish an effective and sustainable teacher education system for primary education. The proposed Project will (i) build the capacity for policy making, planning, and managing teacher training programs; (ii) enhance the professional skills of teachers by training trainers and teachers, and developing curriculum and materials; and (iii) improve access to basic education for girls and other disadvantaged groups by encouraging increased recruitment of teachers from these groups, and providing fellowships for pre-service training to women and candidates from other disadvantaged groups.</p> <p>The Project will have four components: (i) building the institutional capacity of the National Center for Education Development, primary teacher training centers, and Distance Education Center to train primary school teachers by developing staff skills and improving facilities; (ii) developing teacher education curriculum and teaching-learning materials; (iii) training teachers, and educational administrators and managers; and (iv) educating teachers to better serve the needs of girls and other disadvantaged groups.</p>
Classification	Thematic: Human development
Environmental Assessment	Category C: Environmental implications were reviewed, and no significant adverse environmental impacts were identified.
Rationale	<p>Poor quality of classroom teaching is one of the key reasons for the overall low efficiency of basic education, which is manifested through low student learning achievements, and high dropout and grade repetition rates. Improving the quality of classroom teaching is key to improving the quality of education. At present, entry-level qualifications for primary teachers are low, and the majority of teachers have little or no training. Teacher absenteeism is high, and motivation is low. Poor teaching stems from lack of emphasis on training of teachers, an unsuitable teacher training curriculum and teaching methods, and weak management capacity. Adequate institutional capacity is required for the conduct and management of training, curriculum development, and design and development of teaching and learning materials. Enhanced institutional capacity will lead to improvements in teaching skills and competencies of primary school teachers. The ultimate result is improved quality of primary school education.</p>

Objectives and Scope	<p>The Project's objective is to assist the government in improving the quality and efficiency of basic education through better qualified teachers. The specific objectives are to improve the quality and coverage of teacher training by building institutional capacity for a teacher training system that encompasses preservice, in-service, and recurrent training of primary school teachers; and to improve access for girls and other disadvantaged groups.</p> <p>The objective will be achieved by (i) building the capacity for policy making, planning, and managing teacher training programs; (ii) enhancing the professional skills of teachers by training trainers and teachers, and developing curriculum and materials; and (iii) encouraging increased recruitment of female teachers and those from other disadvantaged groups by sensitizing teachers and providing fellowships for pre-service training for women and candidates from other disadvantaged groups.</p>																									
Cost Estimates	<p>The total cost of the Project, inclusive of taxes, duties and other charges, is estimated at \$25.9 million equivalent, comprising a foreign exchange cost of \$7.2 million (28 percent) and a local currency cost of \$18.7 million equivalent (72 percent).</p>																									
Financing Plan	<table><tr><th colspan="5">(\$ million)</th></tr><tr><th>Source</th><th>Foreign Exchange</th><th>Local Currency</th><th>Total Cost</th><th>Percent</th></tr><tr><td>Asian Development Bank</td><td>7.2</td><td>12.4</td><td>19.6</td><td>75.9</td></tr><tr><td>Government</td><td>0</td><td>6.3</td><td>6.3</td><td>24.1</td></tr><tr><td>Total</td><td>7.2</td><td>18.7</td><td>25.9</td><td>100.0</td></tr></table>	(\$ million)					Source	Foreign Exchange	Local Currency	Total Cost	Percent	Asian Development Bank	7.2	12.4	19.6	75.9	Government	0	6.3	6.3	24.1	Total	7.2	18.7	25.9	100.0
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Total	7.2	18.7	25.9	100.0																						
Loan Amount and Terms	<p>The equivalent in various currencies of Special Drawing Rights 15,585,000.00 (\$19.6 million equivalent) from ADB's Special Funds resources. The loan will be repayable over 32 years, including a grace period of 8 years, with a 1 percent interest rate per annum during the grace period and 1.5 percent thereafter.</p>																									
Period of Utilization	<p>Until June 2008</p>																									
Executing Agency	<p>Ministry of Education and Sports (MOES)</p>																									
Implementation Arrangements	<p>The Project will be implemented by the National Center for Educational Development by integrating the project activities within its regular administrative setup.</p>																									

Procurement	All procurement financed by the loan will be carried out in accordance with ADB's <i>Guidelines for Procurement</i> reflecting ADB's anticorruption policy and mandatory use of ADB's standard bidding documents.
Consulting Services	A total input of 58 person-months of international and 309 person-months of domestic expertise will be provided for in-country training and capacity building.
Estimated Project Completion Date	December 2007
Project Benefits and Beneficiaries	The main project benefit will be improved access and quality of basic education through (i) strengthened capacity of training institutions, (ii) upgraded teacher skills, (iii) developed training curriculum and teaching-learning materials, and (iv) further access to education for girls and children from other disadvantaged groups by increasing the representation of females and disadvantaged groups in the teaching force through provision of fellowships for preservice training, and by sensitizing teachers and administrators to the needs of these children. The ultimate, though indirect, beneficiaries will be the children enrolled in primary schools who will benefit through improved learning, and students from disadvantaged groups for whom an enabling environment will be created through the enhanced sensitivity of teachers to their needs. The direct beneficiaries from the project will be (i) the primary school teachers who receive training, and thus upgrade and improve their skills; and (ii) candidates who receive fellowships for preservice training, thereby providing them employment opportunities.



I. THE PROPOSAL

1. I submit for your approval the following Report and Recommendation on a proposed loan to the Kingdom of Nepal for the Teacher Education Project.

II. INTRODUCTION

2. At the request of the Government, the Asian Development Bank (ADB) provided technical assistance (TA)¹ between January and October 2000 to assist the Government in preparing a project for training of primary school teachers. The project will help build an effective and sustainable system for teacher education in the country, thereby filling a critical gap in the Government's efforts to improve the quality of basic education. In the past, ADB provided assistance to the Government under the Primary Education Development Project² (PEDP) to establish the National Center for Education Development (NCED) and nine primary teacher training centers (PTTCs) for training primary school teachers. This Project will build on the investments made through PEDP and strengthen the capacity of these institutions. A Fact-Finding Mission³ was undertaken in February 2001 and an Appraisal Mission⁴ was fielded in May 2001. Throughout TA implementation and the project processing phase, there was close coordination and consultations with the government officials at the Ministry of Education and Sports (MOES), Ministry of Finance (MOF), National Planning Commission (NPC), government agencies, aid agencies, and other stakeholders to forge a consensus on project objectives and modalities. The project framework is in Appendix 1.

III. BACKGROUND

A. Sector Description

1. Economic and Social Context

3. Nepal faces formidable challenges in the economic and social spheres. Despite a series of development plans and assistance from international aid agencies, Nepal's economic growth has barely kept pace with its expanding population. Growth in total output, as measured by gross domestic product (GDP) at factor cost, reached 6.4 percent, the highest annual growth rate in six years and over the 6 percent growth rate projected under the Ninth Five-Year Plan (FY1998-FY2002). The higher overall growth was led by a recovery in agriculture, which grew by 5.0 percent compared with 2.7 percent growth in FY1999.

4. However, structural transformation remains slow. While the share of agriculture in GDP dropped from 63 percent in the 1970s to 40 percent in FY2000, much of this comes from a shift into services. The value of production from services was nearly equal to that of agriculture. Trade, restaurants, and hotels—an industrial category strongly influenced by the level of tourism—were the largest service producers, making up more than 12.2 percent of GDP in FY2000. After a surge

¹ TA 3217-NEP: *Basic Education Project*, for \$600,000, approved on 5 July 1999.

² Loan 1141-NEP(SF): *Primary Education Development Project*, for \$19.5 million, approved on 5 December 1991.

³ The Mission comprised S. Brar, Education Specialist/Mission Leader; L. Gutierrez, Project Economist; J. R. Giri, Institutional Capacity Building Specialist; G. Shrestha, Teacher Training and Curriculum Development Specialist; and B. Thapa, Financial Analyst. E. Haugh Jr, Manager AWEH, provided guidance to the Mission. The Mission was assisted by K.R. Pandey, Project Implementation Officer, Nepal Resident Mission.

⁴ The Mission comprised S. Brar, Education Specialist/Mission Leader; L. Gutierrez, Project Economist; C. Vandenabeele, Legal Counsel; and A. Rorris, Financial Analyst. The Mission was assisted by K.R. Pandey, Project Implementation Officer, Nepal Resident Mission.

in the 1980s, industrial expansion tapered off in the 1990s with industry's share of GDP hovering around the 20 percent range, compared with 13 percent in FY1975-FY1979.

5. Development expenditures rose by 16.1 percent in FY2000, a significant improvement over the previous year but fell short of the 20 percent envisaged in the budget. Foreign grants and loans accounted for about 50 percent of development expenditures in FY2000. Dependence on foreign resources is likely to continue with foreign loans and grants again expected to cover 55 percent of budgeted development expenditures in FY2001.

6. Social indicators in Nepal are weak. The total fertility rate remains high at 4.6. The infant mortality rate at 75 per 1,000 live births is high compared with that in countries at similar income levels. About 71 percent of the population have access to safe water and only 16 percent of households have sanitary facilities. Access to education also remains low. About 50 percent of the population above 6 years is still illiterate and about 30 percent of children of school age are outside school. The major challenge facing Nepal is to overcome this vicious cycle of poverty and low human development. Consequently, special policy efforts and stepped-up investments are necessary to provide universal access to basic human development services, particularly basic education and health.

2. The Education Sector

7. Since the establishment of the formal school system in 1950, school education has undergone continuous change in response to the evolving socioeconomic situation in the country. From 1951 to 1971, primary education comprised five years of schooling. In 1971, with the implementation of a national education system plan, this cycle was reduced to three years. In 1981, the five-year cycle of primary schooling was restored. Similarly, the structure of secondary education changed from the previous three years (grades 8-10) to the current five years (grades 6-10). Grades 6-8, though currently part of secondary education, continue to be referred to as lower secondary. Even now, there is some debate on the need for structural changes in the system. But despite the debate, some basic issues in the sector remain constant. A synopsis of the institutional setup and issues in school education, particularly basic education, is given here.

a. Structure

8. The education system in Nepal consists of five years of primary education, three years (grades 6-8) of lower secondary education, and two years (grades 9-10) of secondary education. Grades 11-12 are currently part of tertiary education. The normal manner of creating secondary schools is by steadily upgrading existing primary schools. Therefore, most schools that are referred to as secondary schools have classes from grades 1 to 10. Some have a kindergarten as well. A few secondary schools also have grades 11 and 12. A school-leaving certificate (SLC) is awarded by examination at the end of grade 10. The certificate entitles one to entry into the tertiary level of education that provides for three possible levels of qualifications: a certificate level, diploma level, and a university degree. Some thought is being given to restructuring of the education sector by integrating grades 6-8 into primary education and grades 11 and 12 into secondary education. However, no time frame for this restructuring has been set.

9. The network of schools in Nepal has expanded considerably, particularly at the primary school level. The number of primary schools grew from about 7,256 in 1971 to 23,885 in 1998/99 and the number of primary school teachers from 27,805 in 1981 to about 91,878 in 1998/99. There are about 6,617 lower secondary schools and 3,624 secondary schools. The teachers in these schools number about 22,000 and 16,600, respectively. Student enrollment grew rapidly at an

annual rate of above 20 percent at all levels of school education between 1950/51 and 1970/71. However, annual growth rates declined to 3 percent, 7.4 percent, and 3.9 percent, respectively, between 1990 and 1997.

b. Administration

10. In the past, the policy formulation and administrative responsibility for school education lay with MOES. However, with increasing external inputs into school education, particularly basic education, the need to separate the policy formulation and implementation functions was felt. Consequently, the Department of Education (DOE) was created in 1999 with overall responsibility for planning, implementing, and monitoring primary and secondary education programs. DOE is headed by a director general vested with full administrative and financial responsibility. There is a regional education directorate for each of the five development regions. Under the regional education directorates are the district education offices catering to 75 districts. They are headed by the district education officers (DEOs) who are responsible for planning and supervising school education at the district level. At the cutting edge, school management committees, constituted according to education regulations of MOES, are responsible for the overall functioning of the school. Grades 11 and 12 are administered by the Higher Secondary Education Board. An organogram depicting the administrative structure of MOES and its line agencies is in Appendix 2.

c. Teacher Training

11. In an evolving educational administration setup, some ambiguities and overlapping of responsibilities remain among the different government agencies and institutions. This is particularly true in the area of teacher training. At present the following sources provide preservice training to primary school teachers: (i) private accredited training institutions that offer a 10-month comprehensive training package, (ii) faculty of education (FOE) of Tribhuvan University that offers a certificate course in education, and (iii) some higher secondary schools (HSSs) that offer courses in the education stream. However, the continued intake of untrained teachers has led to a low demand for preservice training. As a result, many private providers have discontinued the comprehensive preservice training package. The quality of education also remains a concern. In 1999, only 21 percent of students from the education stream of HSSs passed the 12th grade examination. NCED is the apex body for training of primary school teachers. Nine primary teacher training centers (PTTCs) are mandated to provide in-service training to primary school teachers. Due to the large numbers of untrained teachers entering the teaching force, a disproportionate share of the burden for teacher training has fallen on NCED and PTTCs by way of in-service training to raise the competencies of the teachers.

12. Teacher training is also characterized by differing views on optimum training requirements. Under the multisource-funded Basic Primary Education Development Project II (BPEP II), resource centers (RCs) give 10-day recurrent training. BPEP II has also partially financed the 2.5-month basic training package offered by PTTCs. Only recently has consensus begun to emerge that ad hoc training inputs are not having the desired impact in improving classroom teaching and that a concerted and well-coordinated effort is required to upgrade teacher competencies and skills. This includes revisiting the content and duration of training. MOES has recommended a 10-month training currently designed to be imparted through four packages, each lasting for 2.5 months. This training is being implemented to the extent possible, given the limited capacity of the training institutions. The PTTCs are offering the basic package, DEC is providing content-based training in the second and third packages through radio broadcasts, and the PTTCs are offering the fourth package for a very limited number of candidates.

d. Financing

13. Reflecting the Government's commitment to improving the quality of education, government budgetary allocations for education as a percentage of the total budget have risen from an average 10 percent between 1985 and 1990 to an average of approximately 13 percent in the 1990s. In FY2000, 13.2 percent of the total budgetary expenditure was allocated for education. It amounted to 3.2 percent of GDP. In the education sector, primary education accounted for 55 percent of the education budget, followed by secondary education (20 percent), and higher education (19 percent). The remaining 5 percent went to other categories such as educational administration, technical and vocational education, and other smaller programs. In keeping with the goal of universalizing primary education and the heightened external inputs in the subsector, government allocations for primary education, as a percentage of the total education budget, showed a sharp increase from about 49 percent in FY1995 to 55 percent in FY2000.

14. In 1975, the Government made primary education up to grade 3 free and compulsory. With the restructuring of the subsector, education has been free up to grade 5 since 1981, with the operating costs borne entirely by the government. Teacher salaries account for 95 percent of the expenditures on primary education. Reliance on external assistance to the education sector has grown sharply. In 1991, external assistance was less than 10 percent of the total education budget. By 1995 it had increased to 25 percent. In FY2000, the education sector accounted for 10 percent of all external assistance to Nepal.

3. Key Issues in Basic Education

a. Equity and Access

15. Access to basic education in Nepal has improved significantly in the last two decades. The Government has been able to provide a reasonable network of schools, with more than 88 percent of the population having a primary school within 30 minutes walking distance from their residence. In the last decade, enrollment in basic education increased from 2.88 million in 1991 to 3.46 million in 1997. The number of schools increased from 18,694 to 23,284 during the same period. Primary school teachers increased from 74,495 to 91,464. Literacy rates rose by 300 percent between 1971 and 1991. Nonetheless, effective access to basic education is far from universal or equitable. About 50 percent of the children in the 6+ years age group are still illiterate and about 30 percent of eligible children are still not enrolled in school. Most of the out-of-school children are from poor and disadvantaged families living in remote areas. Girls are disproportionately represented among the out-of-school children.

16. The gross enrollment ratio is 124 percent at primary level, but the net enrollment ratio is only 71 percent. The gross enrollment ratio at the lower secondary level is only 53 percent whereas the net enrollment ratio for lower secondary and secondary level is 31 percent and 20 percent, respectively. There are considerable variations by sex, social and income groups, and region. Girls constitute only 41 percent of total primary enrollment and 38 percent of lower secondary enrollment. Gaps in enrollment between the poor and the non-poor are also significant. The Nepal Living Standards Survey shows that children from the highest income quintile are twice as likely to be enrolled in primary school than those from the lowest quintile.

17. Participation rates also differ widely across the ecological and development regions, with people living in the mountainous belt and the far-western region being the most disadvantaged. The net enrollment ratio ranges from 58 percent in the eastern region to 77 percent in the western

region. Similarly, girls' enrollment is lowest in the eastern region (26 percent) and highest in the western region (43 percent).

b. Quality

18. Low internal efficiency and poor quality further compound the problems of equity and access. The quality of basic education remains a major cause of concern due to the internal inefficiency of the primary school system evident in high levels of dropout and grade repetition. Indicators of poor quality include high-grade repetition rates, low rates of transition to higher levels of education, and low student learning outcomes. The incidence of grade repetition is very high among first graders and fifth graders. MOES estimates from 1996 show that 40 percent of children enrolled in grade 1 repeat, and only 37 percent graduate to grade 2. Repetition rates average approximately 20 percent at each grade level. Dropout rates are high: 23 percent drop out of grade 1 and 15 percent dropout of grade 5. Underage enrollments in grade 1 and the generally poor school and classroom environment account for the high dropout rates. Girls and children from low-income families are more likely to drop out. High repetition and dropout rates waste the scarce resources available for primary education.

19. Student learning outcomes at both the primary and the secondary level are considered unsatisfactory. A national study of grade 3 and grade 5 students shows that the achievement levels are generally low in the three core subjects—Nepali, mathematics, and social studies. Only 75 percent of students in grade 8 receive passing marks in examinations. Again, learning outcomes for girls are poorer. These low outcomes result from inequitable access to quality education, uncongenial learning environment, inadequately trained and poorly motivated teachers, and lack of quality learning materials.

c. Teacher Training

20. The overall competencies and qualifications of primary school teachers are considered inadequate. The entry-level qualification for primary school teaching is grade 10. A 10-month preservice training is recommended, but is not a mandatory requirement for recruitment of teachers. An ad hoc approach to teacher training has resulted in a teaching force with diverse levels of training. Of the approximately 90,000 primary school teachers in the country, approximately 32,000 teachers have no training of any kind, and only 156 teachers have gone through the 10-month training package. The entry of large numbers into the teaching force without any preservice training places a heavy demand for in-service training on the limited capacity and scarce resources of NCED and the PTTCs. The poor performance of teachers in basic education is a key constraint to improving the quality of education. Teacher absenteeism is high, reflecting weak school supervision and lack of community participation. The problem is compounded by lack of a satisfactory system of regular preservice and in-service training in the country. Improving the quality of teaching is central to Nepal's education reform efforts.

21. Institutional capacity for policy planning and management of basic education in general is limited. This is being addressed through BPEP II. However, teacher training support for basic education has been addressed in a very limited way. Even though the program implementation plan of BPEP II has spelled out the need for long-term training, given the very large number of teachers with no or little training, BPEP II focused on providing two-weeks recurrent training.⁵ The Government holds the view that given the low entry-level qualifications of primary school teachers,

⁵ BPEP II sources are also providing provisional finance for the basic package of 2.5 months, pending the outcome of ADB's proposed assistance for teacher training.

a 10-month training package is essential for improving teacher competencies. There is a strong rationale for creating a system for long-term, regular teacher education programs. This requires concerted support for strengthening institutional capacity to take on the increased responsibility for design and delivery of teacher training. In the past, ADB assisted the Government through PEDP (footnote 2) for infrastructure support for NCED and nine PTTCs. These institutions need considerable strengthening to effectively carry out their mandate for teacher training. They need adequate and effective linkages with departments and agencies of MOES that are currently involved in training primary school teachers under the BPEP II program with the goal of integrating all these training activities under the umbrella of NCED and the PTTCs.

B. Government Policies and Plans

22. The Government has consistently emphasized the importance of teacher training as a major strategy for improving the quality of school education. The National Education Commission and official documents emphasize preservice training. References to teacher training are made in various official documents, but in the absence of a single comprehensive source of policies related to teacher recruitment and training, implementation of these policies remains haphazard and many of the Government's avowed intentions remain unfulfilled. For instance, even though the Government has stipulated that no untrained teachers will be recruited, in effect, untrained teachers continue to be recruited. This places a large burden on the limited institutional capacity for teacher training and additional in-service training. Besides, the lack of a clear-cut policy for teacher training and recruitment not only has swelled the ranks of untrained primary teachers; it also has acted as a disincentive for teachers to undergo preservice training. The reduced demand for preservice training, in turn, resulted in its discontinuation by private providers.

23. The emphasis of the five-year development plans on in-service training is an inadequate response to raising teacher competencies. Emphasis on in-service training without concurrent emphasis on preservice training has resulted in a perennial stock of untrained teachers in primary schools. The lack of an incentive package and promotional avenues acts as a further disincentive for teachers to undergo training. Given the low entry-level educational qualifications of teachers, a well-designed preservice training package that emphasizes both content and pedagogical skills is necessary to ensure improved classroom teaching.

24. The Government is committed to making the 10-month teacher training mandatory for all new and untrained permanent teachers, with some flexibility for teachers who have more than three years teaching experience. However, the institutional capacity for implementing these policies remains weak and provision of training remains an ad hoc process.

C. External Assistance to the Sector

25. External assistance to the education sector in Nepal is substantial and has been increasing over the years. The proportion of external assistance in total education expenditures increased from 7.2 percent in FY1992 to 25.4 percent in FY1995 as a result of considerable aid agency activity in the education sector in the last decade. The relatively high illiteracy rates and the emphasis on universal primary education have focused aid agency interest on basic education.

26. ADB and the World Bank are the major lenders in the education sector. ADB has provided five loans totaling \$56.1 million and 11 TA grants totaling \$5.1 million. This assistance has focused on primary education (mainly on a long-term teacher training program), secondary education, and technical and vocational training. The World Bank has financed six projects in primary education, higher education, and technical and vocational training. The major bilateral agencies providing

grants for the education sector are the Danish International Development Assistance (Danida), Department for International Development (DFID) of the United Kingdom, European Union, Finland, Japan International Cooperation Agency (JICA), Norwegian Agency for Development, Swiss Development Corporation, United Nations Children's Fund (UNICEF), and World Food Program. Major interventions in the school sector in the last decade are as follows:

1. Basic Education

- (i) A multisource-assisted⁶ Basic and Primary Education Project was implemented in 1992–1999 with the objective of increasing access to basic and primary education, improving the quality of basic education, and enhancing management efficiency. A second phase, BPEP II, is being implemented. A consortium of sources⁷ is providing assistance of \$102.5 million through a funding mechanism called the “basket approach.” ADB did not join this consortium because it already had two ongoing projects in education. There was also a technical difficulty with the approach because of the possible dilution of ADB's disbursement procedures. The focus of BPEP II is on improving access, rates of retention, and learning achievements; and building the capacity to plan, manage, and deliver education services. The objective of the program is to strengthen institutional capacity at national, district, and school levels to deliver more efficient and better quality basic and primary education services, thereby raising learning achievement and increasing equitable access, especially for girls and other socially disadvantaged groups. JICA and UNICEF are supporting this program outside the basket, in the area of school construction, early childhood development, and out-of-school programs.
- (ii) ADB supported the Primary Education Development Project (footnote 2) with a loan of \$19.5 million. The Government of Norway provided a grant of \$1.4 million equivalent for academic consulting services and fellowship training. The objective of PEDP was to assist the Government in improving the quality of and access to primary education, with focus on teacher training. A major outcome of PEDP was the establishment of NCED and nine PTTCs. In the context of the then prevailing teacher training philosophies, the project also (a) supported the development of teacher training curricula and teaching materials, (b) supported programs for management personnel in primary education and for teacher trainers, (c) assisted the Faculty of Education of Tribhuvan University to prepare qualified manpower for primary education in Nepal, (d) assisted the Government to analyze and develop policy options for the future delivery of preservice training for primary school teachers, and (e) constructed and rehabilitated about 1,500 primary schools in underserved areas. The ADB loan closed in March 2000.

2. Secondary Education

- (i) ADB provided support for the Secondary Education Development Project⁸ (SEDP) with a loan of \$12.6 million against a total project cost of \$15.8 million. The project components included (a) curriculum and textbook development; (b) in-service training for secondary school teachers; (c) examination reform; (d) improvement of science facilities in selected HSSs; (e) provision of science equipment, learning

⁶ Danida, the Government of Japan, UNICEF, and World Bank.

⁷ Danida, European Union, Department for International Development Cooperation (formerly Finnish International Development Agency, [FINNIDA]), Norwegian Agency for Development, and World Bank.

⁸ Loan 1196-NEP (SF): *Secondary Education Development Project*, for \$12.6 million, approved on 24 November 1992.

materials, and library books to 1,000 secondary schools; and (f) improved management and planning. DFID provided an additional \$8.8 million for staff development, consulting services, research, and benefit monitoring and evaluation (BME). The ADB loan closed in June 2000. DFID financial support continues and is likely to continue until June 2002.

27. These interventions have contributed to significant additions to and improvements in infrastructure and improved capacity for planning, management, and delivery of education. The interventions have also contributed to quantitative gains in enrollment over the years. However, a continuing concern is that student learning outcomes have not shown improvements commensurate with the inputs. The quality of teaching is cited repeatedly as one of the lingering causes of poor quality of education. Under PEDP, ADB created the infrastructure for teacher training that now needs to be strengthened.

28. In addition to the proposed project for teacher training, in the current year an ADB TA will enable the Government to undertake a comprehensive analysis of the secondary education sector so as to identify issues, prepare strategies for addressing these issues, and prepare detailed financial plans for the sector. This is in keeping with the shift toward broader, more holistic subsector-wide interventions in the education sector in Nepal. The benefits from this approach include integrated planning, coordinated interventions for optimum impact, and efficient resource allocation and management.

3. Aid Coordination

29. The Government is currently implementing BPEP II which is jointly funded by a consortium of aid agencies using the basket approach. BPEP II envisions comprehensive inputs into basic education. Any additional inputs that have an impact on basic education need to be carefully and closely coordinated with BPEP II. Throughout the implementation of ADB's project preparatory TA, close coordination was maintained with the BPEP sources and the design of the proposed Project took into account the linkages that are necessary for coordination of activities to ensure complementarity of objectives. DOE is responsible, through the DEOs, for preparing annual education plans, selecting teachers for training, supervising teachers, as well as for administrative matters affecting both teachers and schools. The DEOS also maintain liaison with the RCs that are currently responsible for the two-week recurrent teacher training provided under BPEP II. The Project, therefore, envisions NCED to maintain close links with DOE and the PTTCs to maintain close links with DEOs and, through DEOs, with RCs, in selecting teachers, and for follow-up and supervision. This will be done through the establishment of coordination committees. DOE, DEO, and RC personnel will receive training at NCED and PTTCs. To the extent possible, ADB will synchronize the timing of the teacher education policy reviews with the BPEP II review missions. ADB will, however, participate in the joint aid review missions of BPEP II, particularly the planning exercise related to teacher training and management.

D. Lessons Learned

30. External assistance to education has provided valuable lessons for future interventions including this Project. ADB's experience in implementing projects in the sector indicates that despite the positive overall project impact, some areas need to be strengthened during project design and implementation. A review of the postevaluation reports indicates that

- (i) project components aimed at improving and strengthening crucial educational components, such as curriculum development and staff training, appear to have

been underemphasized as far as financial provisions were concerned, and the design of the fellowship input was generally not optimal because this component is normally designed during implementation and not when the projects are prepared;

- (ii) ADB supervision was considered inadequate in terms of the frequency and composition of review missions dispatched, the assistance provided in procurement-related aspects, planning and implementation of fellowship programs, and the development of a satisfactory mechanism for BME;
- (iii) ADB's approach to institutional capacity building requires a critical review to address the issues related to appropriateness of an organizational structure, staffing pattern, and career development and incentive arrangements;

31. Some broad lessons learned from interventions in the education sector in Nepal follow:

- (i) Although BPEP I laid the foundation for efficient delivery to improve the quality of education, it had no substantial achievements in the learning and achievements of students. Teacher performance was identified as one of the key areas for quality improvement.
- (ii) Interventions to increase girls' enrollment and retention by appointing female teachers, strengthening in-service teacher training, and integrating project management into MOES will not be sustained unless there are clear-cut policies to reinforce them.
- (iii) Given the change in the training requirements from 150 hours to 10 months, PEDP should have been revised to provide adequate academic consulting services during the training period. As a newly created institution, NCED had no consulting services support during delivery of training. As a result, the poor professional resource base produced poor-quality training. Sustained ongoing inputs are needed in building professional, administrative, and managerial capacity in institutions responsible for teacher training. Adequacy, deployment, and quality of consulting services need to be ensured.
- (iv) Consistent follow-up, monitoring, and on-site professional support to teachers are required to effect changes in classroom teaching practices and behavior. Poor classroom teaching practices remain a major deterrent to improving the quality of school education.
- (v) One-time, short-term training of teachers is inadequate to bring about changes in classroom teaching behavior.
- (vi) Lack of a comprehensive, coordinated, and well-articulated policy for teacher training has resulted in the entry of a large number of untrained teachers in the primary school system.
- (vii) Institutional coordination needs considerable improvement to strengthen teacher training.

32. The project preparation stage has taken into account the lessons from past experiences. It addresses the critical need to improve the quality of teaching by designing an efficient and

sustainable teacher education system. The Project emphasizes institutional capacity building and provides for extensive professional development of NCED and PTTC staff. Institutional capacity will be strengthened by integrating project activities with the day-to-day functioning of the implementing institutions. The functions of the interministerial steering committee have been merged with the program execution board of BPEP II to allow integrated planning. Institutional linkages and coordination mechanisms have been created for supervision and follow-up support to teachers. A coordinated and well-articulated policy for teacher training will be developed. A list of major external assistance, lessons learned, and how these lessons have been incorporated in the Project are in Appendix 3.

E. ADB's Sector Strategy

33. ADB's revised education policy calls for ADB to be a stronger advocate of basic education by undertaking public expenditure reviews in the context of country programming to ensure that developing member countries with low public expenditures on education allocate a more appropriate share of budgetary resources to basic education, particularly for girls and the poor. ADB's long-term strategic framework calls for greater support to the international development goals of (i) 100 percent enrollment in primary schools by 2015, and (ii) elimination of gender disparities in primary and secondary education by 2005. These are congruent with the global goals of education for all. ADB's poverty reduction strategy also calls for support in providing basic services, including education, as a key poverty reduction measure. ADB's sector strategy for education is, therefore, a part of its overall strategy for poverty reduction of which social development, including human capital development, is a key component.

34. ADB assistance to the education sector in Nepal is consistent with the Government's priorities on improving access to and the quality of primary, secondary, and nonformal education, and will improve human capital development as part of its poverty reduction strategy. While access to primary education has improved considerably, the efficiency of grades 1-5 is low with high repetition and dropout rates. There are considerable disparities in access due to gender and geographic location. The quality of education needs to be improved through teacher training, curriculum development, and better school management, maintenance, and supervision.

35. In the past ADB gave assistance for primary education, secondary education, and vocational education in Nepal. In the primary education subsector, ADB has concentrated on improvements in teacher training. Over time, ADB's strategy⁹ for the education sector in Nepal has evolved to emphasize strengthening the investments made during past projects and build on them within a more holistic, subsector approach. The proposed Project for teacher education has been conceived to strengthen the capacity of the teacher training institutions for which ADB had helped create the infrastructure under PEDP. These institutions will fill a critical gap in the area of teacher training that will complement the broader support for basic education under BPEP II. In secondary education, ADB in coordination with Danida is implementing a TA to devise a comprehensive strategy for investment in the subsector.

F. Policy Dialogue

36. The need for a coherent teacher training policy was recognized and pursued by PEDP. As an initial response, the Government adopted two policies: (i) all primary teachers are to hold at least an SLC pass, and (ii) all primary teachers are required to complete a short-term program of

⁹ T.A. No. 2421-NEP: *Education and Health Sectors Assistance Strategy Study*, for \$345,000, approved on 13 October 1995.

in-service training unless they have already been trained. For the longer term, it was emphasized that a carefully conceived strategy was needed to provide (i) basic in-service training to the existing batch of teachers, and (ii) adequate preservice training to new teachers. It was also emphasized that, for the long term, the Government would adopt a policy that will avoid a backlog of untrained teachers indefinitely. Most of these concerns remain valid to date and it is urgent that policy measures for teacher training be strengthened.

37. The Government recognizes the role and importance of teacher education in improving the quality of education and is strongly committed to the proposed Project. It has specifically emphasized (i) strengthening the NCED and PTTCs created through PEDP; (ii) developing NCED as the apex body for training teachers and educational administrators; (iii) developing the training strategies to support the achievement of BPEP II objectives; (iv) supporting private providers of training by providing educational materials, curriculum development, and training the trainers; and (v) clearing the backlog of untrained teachers already in service as early as possible.

38. A review of progress under BPEP II indicates that a major constraint to improving the quality of basic education is the quality of teaching itself. The current in-service training for teachers is not enough to translate into improved teaching practices in the classroom. The low-level entry qualifications for primary school teachers coupled with the overall poor quality of education necessitate a structured, well-designed program for both preservice and in-service teacher training. However, the large number of untrained teachers already in the system presents a challenge that needs to be accorded high priority. Consequently, in preparing the Project, policy dialogue with the Government has centered on the contribution of the Project to (i) improving the quality and efficiency of basic education by improving the skills and training of primary school teachers; (ii) institutional capacity building to take on the responsibility for current and future teacher training needs; and (iii) improving access for disadvantaged groups, particularly girls, through greater representation of women, especially from disadvantaged groups, in the teaching force. In view of the ongoing multisource inputs in the school sector, aid coordination and Government policies affecting aid inputs were also discussed.

1. Coordination of Aid Inputs

39. Given the formidable challenge that Nepal faces in achieving the goals of gender parity and increasing enrollments in primary education, the aid community provides substantial assistance to the education sector. Coordinating external assistance and dovetailing it effectively into the education system pose a challenge. Extensive discussions were held with Government and aid representatives to ensure that the proposed Project will complement the inputs of BPEP II. Careful thought was given to dovetailing the teacher training activities of BPEP II into the planned expanded activities of NCED and the PTTCs. These institutions will also support the RCs established under BPEP II for giving training and assistance to teachers in schools.

2. Teacher Recruitment and Training Policy

40. It is agreed that a comprehensive policy framework for teacher training is necessary. Even though the Government has made preservice training mandatory for recruiting new teachers, in the past this policy has not been enforced. Continued recruitment of untrained teachers has rendered the policy ineffective and reduced the demand for preservice training while increasing the pressure on limited resources for training teachers already in service. Strict enforcement of the policy is a prerequisite to the establishment of a teacher training system. The Government has included a provision for mandatory training in the amended Education Act awaiting parliament's approval.

41. Given the very large number of untrained teachers in the system and the weak emphasis on training, teachers are not inclined to undergo training since they see no benefit from it. It was therefore agreed that a system of incentives will be designed to encourage completion of the 10-month in-service training.

42. A teacher recruitment and training policy must also address the issue of service in remote and disadvantaged areas. Due to the low level of education in these areas, an adequate number of suitable local candidates are seldom available. Thus outsiders are appointed to schools in these areas, leading to one of the causes of high absenteeism. Concerted efforts will be made to recruit more teachers from disadvantaged groups as well as those from remote and disadvantaged areas.

43. Greater representation of women in the teaching profession will be supported. It is well documented that in traditional societies, parents are reluctant to send their girls to school with no female teachers. Therefore, to bridge the enrollment gap between girls and boys, the ultimate target of recruiting is to increase women teachers to at least 50 percent of the teaching force. Given the current low levels of representation and the low attrition rates, this target will not be achieved for many years to come. The Government has expressed its commitment to the goal of increasing representation of women teachers in the teaching force. This is necessary for gender sensitization as well as for greater visibility and demonstrational effect as role models in a society where opportunities for women remain limited.

3. Institutional Capacity Building

44. The institutions responsible for training primary school teachers—NCED and the PTTCs—require support to enhance their capacity. A key input for effective capacity building is effective leadership. It was, therefore, emphasized that heads of NCED, PTTCs, and DEC must be carefully selected and that continuity of personnel in the institutions must be ensured so that training is not wasted on staff who will later transfer to other positions outside the training institutions. The Government has agreed to (i) convert the temporary positions in these institutions to permanent positions to boost staff commitment and morale, and (ii) devise guidelines for selecting the heads of training institutions and provide for stable tenure.

4. Project Sustainability

45. The Government agreed to (i) sustain the project by providing adequate recurrent budgetary support for operation and maintenance for effective functioning of the training institutions; (ii) provide stable tenure for NCED and PTTC personnel; and (iii) emphasize training by making preservice training mandatory, by not recruiting any more untrained teachers, and by providing for incentives for completing the suggested 10-month training packages for teachers already in service.

IV. THE PROPOSED PROJECT

A. Rationale

46. Despite considerable achievements in expansion, the quality, efficiency, and effectiveness of basic education remains low. The poor quality of classroom teaching is one key reason, which is manifested in low student learning achievements, and high dropout and grade repetition rates. A teaching force with little or no training has a major impact on the quality of classroom teaching. It is increasingly recognized that improving the quality of classroom teaching is key to improving the

quality of education. At present, entry-level qualifications for primary teachers are low and most teachers have little or no training. Teacher absenteeism is high and motivation is low.

47. Poor teaching quality stems from lack of emphasis on training of teachers, an unsuitable teacher training curriculum and teaching methods, and weak management capacity. In view of the low entry-level qualifications of primary school teachers, a well-designed system of preservice and in-service training for them is essential. The design of such training systems necessitates adequate institutional capacity to conduct and manage training, develop curricula, and to design and develop teaching and learning materials. BPEP II is undertaking large-scale interventions to improve the quality of basic education.

48. The Project provides critical complementary support to BPEP II by addressing the issue of teacher quality through comprehensive teacher training. This was not fully addressed by BPEP II for reasons explained in para. 21. It is felt that further neglect of issues related to teacher training is likely to have a negative impact on the effectiveness of the BPEP II inputs. The Project is designed to address these issues. However, it is recognized that given the limited emphasis on teacher training so far, the Project has a rationale independent of other quality improvement inputs into the primary education system.

B. Objectives and Scope

49. The Project's overall sectoral objective is to assist the Government in improving the quality and efficiency of and access to basic education through provision of better-qualified teachers. The specific objectives are to improve the quality and coverage of teacher training by enhancing the institutional capacity of a teacher training system that encompasses preservice, in-service, and recurrent training of primary teachers and to increase the representation of disadvantaged groups,¹⁰ particularly females, in the teaching force. The Project's objective will be achieved by (i) building the capacity for policy making, planning, and managing teacher training programs; (ii) enhancing the professional skills of teachers by training the trainers and teachers, and developing the curriculum and materials; and (iii) improving access to basic education for disadvantaged groups, including women, by encouraging increased recruitment of teachers from these groups; by sensitizing teachers to the needs of pupils, and by providing fellowships for preservice training for prospective teachers from disadvantaged groups, particularly women.

50. Even though the Project will be implemented over six years, it envisions a system for teacher training that aims to clear the backlog of untrained teachers and provide preservice and recurrent training on a continuing and sustained basis. As a strategic input to improving the quality of basic education for girls and other disadvantaged groups, the Project also recommends strategies for recruiting and training teachers from such groups. The objectives will be achieved through the following four components: (i) building institutional capacity for delivering training for primary school teachers by developing staff skills and improving the facilities of NCED, PTTCs, and DEC; (ii) developing teacher education curriculum and teaching- learning materials; (iii) training

¹⁰ Given the sociocultural nature of disadvantage, the definition of disadvantaged groups remains amorphous. For the social impact assessment undertaken for the Project disadvantaged groups are defined as "those oppressed, deprived and downtrodden people making their living on traditional occupation; deprived and oppressed because of socio-economic reasons and listed as such in HMG's Gazette" (Manav Maryada, HMG Ministry of Local Development, National Committee for the Development of the Oppressed and the Downtrodden, vol.1, no.1, p.2). However, for the purpose of the Teacher Education Project, "disadvantaged groups" means those groups, as may be agreed upon from time to time between HMGN and ADB, who, because of geographical or socio-economic reasons, generally do not have equal access to opportunities. A non-exhaustive list is at Appendix 10, page 4.

teachers and educational administrators and managers; and (iv) educating teachers to better serve the needs of the disadvantaged groups and girls.

51. The Project has been designed in a highly participatory manner with the active involvement of all the stakeholders: government officials and agencies, aid agencies active in education, non-governmental organizations, parents, teachers, and communities particularly in selected districts where the majority population belongs to disadvantaged groups. In particular, teachers were actively involved in the teaching needs assessment which was based on the curriculum for the basic 2.5-month training package. Detailed consultations were also held with the officials at NCED, selected PTTCs, and DEC to assess their existing capability and projected needs. The project components are described here (details are in a supplementary appendix).

1. Building an Effective and Sustainable System for Teacher Education (Component 1)

52. This component will provide quality training to meet the needs of the country for qualified primary school teachers. It will strengthen institutional capacity to implement a comprehensive system for teacher training. The Project will do this by supporting key training institutions like NCED, PTTCs, DEC, and other private providers to create a network of institutions that can take on the responsibility of teacher training in the long term. The technical capacity of the staff will be strengthened through training using multiple modalities. A detailed staff development plan is in Appendix 4. Some enhancement of facilities will also be supported to enable the institutions to discharge their roles effectively. Support will also be provided to DEC for refurbishing recording studios. Private providers of teacher training, and higher secondary schools and faculty of education campuses providing preservice training will also receive support for training trainers, and improving instructional materials. Specific inputs for institutional capacity building include the following:

a. NCED and PTTCs

53. NCED and PTTCs were established to take on the responsibility for training primary school teachers. Due to the limited emphasis on teacher training, however, NCED and PTTCs were given neither the responsibilities nor the inputs to enable them to develop according to the role envisioned for them. NCED and the PTTCs will be strengthened through several measures:

- (i) Administrative reorganization. An assessment of staff needs indicates that NCED and PTTCs are operating below capacity and, even with additional responsibilities for training accruing from the Project, additional staff requirement is minimal. These institutions, however, have staff posted against temporary positions. The temporary positions will be converted into permanent ones. In addition, NCED will be given a procurement consultant. The financial section of NCED will be strengthened by upgrading the position of the financial officer to that of financial analyst. The administrative structure of the PTTCs will be reorganized to strengthen and streamline their operation.
- (ii) Staff development. Substantial inputs are needed to upgrade the skills of the staff at NCED, the PTTCs, and DEC. Developing staff skills is key to long-term institutional capacity building. The Project will provide, both in-country and international training for master trainers, curriculum and materials developers, and management staff. In-country training will need 58 person-months of international consultants and 309 of domestic consultants. Included are the services of an adviser who will be based in

NCED to give technical support to the Project. In all, 41 staff members from NCED, 73 from PTTC, and 16 from DEC will benefit from international and in-house training.

- (iii) Infrastructure development. The complex of NCED and that of the PTTCs are new and were developed under the ADB-financed PEDP. The quality of civil works is generally poor and each complex requires some improvements and additions to make it fully functional. With the increased responsibility to be vested on the institutions, certain additional facilities are considered essential. NCED will have a training resource center with a seating capacity of 30 people. The center will be fully equipped with training materials, reference books, nonprint materials including audiovisual equipment, and a computer lab. NCED will also be provided with a desktop publishing facility to enable it to produce and internally disseminate teaching learning materials. For the training candidates, a hostel for 30 persons with dining facilities will be added to the existing NCED complex. The shortcomings of each PTTC complex will be identified and rectified. Each PTTC will also have a fully equipped multimedia lab with audiovisual equipment and computers.
- (iv) Teacher management information system. The teacher management information system (TMIS) at NCED will be strengthened for improved collection, management, and analysis of data on teacher training. The TMIS will be linked to the education management information system (EMIS) of DOE to allow for coordinated planning, management, review, and evaluation of teacher training. PTTCs will be strengthened to collect and process data. Concerned staff from NCED and PTTCs will receive training in TMIS.

b. Training Management and Coordination Committee

54. To support the above inputs, the capacity to formulate and periodically review the teacher education policy will also be strengthened by strengthening the training management and coordination committee (TMCC). The Education Regulations of 1992 mandates the TMCC to review the policy for teacher training and recommend to the Government changes in policy. The membership of the TMCC will be expanded for a broader representation of agencies concerned with basic education. The reorganization of the TMCC will take place before project implementation to enable it to undertake some preparatory policy-related activities. To facilitate the effective functioning of the TMCC, NCED will serve as the secretariat with the NCED executive director serving as member secretary. This will ensure close linkages and coordination between the TMCC and NCED.

c. Assistance to Providers of Pre-Service Teacher Training

55. After the backlog of untrained primary school teachers has been cleared, NCED and PTTCs will be responsible for in-service recurrent training only. Preservice training will be the responsibility of private PTTCs, HSSs, and FOE campuses. The TMCC has approved 15 private PTTCs. Another 15 FOE campuses and 35 HSSs will be selected to give training. These institutions will be accredited to attain the target of trained preservice teachers and will assist in training untrained in-service teachers. The capacity of the selected institutes will be strengthened by (i) providing increased access to NCED and PTTCs services, e.g., training RCs, media laboratory, and TMIS; (ii) providing trainers' training to 900 staff of these selected institutions to enable the institutes to conduct both in-service and preservice teacher training; (iii) providing

printed teaching-learning materials, e.g., trainers guides, resource materials, etc.; and (iv) encouraging participation in training and curriculum-related workshops, seminars, etc.

d. Institutional Linkages

56. Creating effective institutional linkages is an essential component of capacity building. To optimize the benefits of inputs and resources, all teacher-training activities must be coordinated and linkages established among institutions responsible for primary education. Since DOE is responsible for administering primary education, the linkages between NCED and DOE will be strengthened by forming a coordination committee with representation from NCED, DOE, DEC, and other related agencies as NCED may consider appropriate for effective implementation and coordination. The activities of the concerned agencies will be coordinated by (i) including teacher training in the district education plans; (ii) formulating district teacher training plans that will be approved by DOE in consultation with NCED; (iii) NCED providing professional support in the design and development of recurrent teacher training packages; (iv) having DEOs provide NCED with information needed for accrediting the recurrent teacher training programs; (v) having concerned staff members of DOE as members of training program and materials development teams; (vi) having DOE deputize staff and resource persons for training as master trainers and as resource persons for the conduct of training; (vii) deputizing teachers, supervisors, resource persons, DOE personnel as master trainers and trainers for PTTCs; (viii) supervising trained teachers to assess and monitor posttraining classroom behavior; (ix) giving feedback to PTTCs about the performance of trained teachers in the classroom; and (x) sharing information in monitoring and evaluation.

2. Developing Effective Teacher Education Curriculum and Materials (Component 2)

57. This component will focus on an improved teacher training curriculum and development of teaching learning materials to make training more effective, participatory, activity-based, and linked to school practices. The existing curriculum for teacher training has a heavy content bias. While teachers' mastery of the subject matter needs to be strengthened, their pedagogical skills also need to be strengthened. The national primary teacher-training curriculum has been revised to meet the goals and objectives of basic education. It incorporates pedagogical skills to improve the effectiveness and relevance of classroom teaching. Under the TA to prepare for the Project, a teacher needs assessment was carried out. The revised curriculum is based on that assessment. The comprehensive in-service training package includes (i) a training curriculum, (ii) trainers' guide, (iii) training of trainers (TOT) manual, (iv) resource materials for trainees, and (v) a materials preparation kit.

58. The 10-month curriculum is split into four packages, each lasting for 2.5 months. The curriculum for the first or the basic training package was prepared and was approved by the TMCC. Packages 2 and 3 of 2.5 months each will be offered by distance mode. To facilitate this mode, the curriculum of the two packages has been integrated. To improve the quality and efficiency of the training programs, DEC staff will receive short-term international training in script writing, and distance education teacher training and management. Package 4 is designed to be an interactive package that gives 40 percent of the time to practice teaching in the classroom. Even though the curricula for the integrated packages 2 and 3 and package 4 have been developed, supporting materials such as the TOT manual, trainers guide, resource material for trainees, etc., will be developed under the Project. The trainers guides will be pretested and a national workshop organized to validate the training curricula. In addition, the Project will support the preparation of materials for cultural and gender sensitization for administrators as well as teachers.

59. Under the project preparatory TA, a 10-month preservice curriculum was prepared. However, UNICEF also supported the preparation of a preservice curriculum of shorter duration through FOE, Tribhuvan University. NCED will synthesize and integrate these two curricula. It is expected that with the enhanced professional capacity of the institutions engaged in teacher training, the curriculum will be an evolving one, taking note of, and incorporating newer trends and methodologies based on research and feedback.

3. Providing Teacher and Management Training (Component 3)

60. Under this component, approximately 32,000 teachers (approximately 38 percent of primary school teachers) that have so far received no training will complete the basic training package of 2.5 months. Thus, at the end of five years, all primary school teachers will have received the basic package of training. In addition, during the Project another 41,000 primary school teachers (approximately 48 percent) will complete the integrated packages 2 and 3, and 34,000 teachers (approximately 40 percent) will complete package 4. During this period, preservice training (of 10-month duration and following the schedule and modalities separately designed for preservice training) will also be given to approximately 15,000 teachers.

61. In addition, 100 officials and 500 primary school principals will receive management training annually. NCED will conduct management and orientation programs for (i) officials of MOES and affiliated agencies, (ii) regional education directors, (iii) DEOs, (iv) school supervisors, and (v) primary school headmasters. The Project will assist in building in-house capacity within NCED to conduct management training. International and domestic consultants will assist in preparing the management training curriculum as well as training materials.

62. Due to differing training modules in the past, primary school teachers have received training of different duration, lacking consistency. The Project will address this lack and will bring uniformity to the level of training the teachers receive. Approximately 9,700 teachers have received 150 hours of training. They will receive an additional 180 hours through RCs and secondary education development units to bring them at par with the teachers who have received the basic package. There are 3,200 teachers who, in addition to the basic package, have received only package 2 through distance education. The Distance Education Center (DEC) will train these teachers in the old package 3. In view of their teaching experience, 4,300 teachers aged above 50 years will receive shortened training of 2.5 months duration specially designed for the group. All teachers are expected to complete package 1 of training in five years. Training in the integrated packages 2 and 3 will be completed by the eighth year and package 4 will be completed by the ninth year.

63. PTTCs, HSSs, RCs, and secondary education development units will be used to expedite the training of primary school teachers. Mobile training units will be used for training in remote areas. Private training institutions and university campuses will also be strengthened to build the capacity to meet future training needs of the primary school system.

64. The required number of trainers will vary from year to year. For the basic package, the trainers will vary from 249 in year 4 to 160 in year 5. For package 4, the need for trainers will increase gradually from 27 in the first year to 635 in the sixth year. PTTCs will work with a constant group of 63 trainers. For the rest, trainers from institutions involved with training will be identified. The identified trainers will receive TOT from NCED and PTTCs. TOT packages will include training manuals for the trainers. At the start of the Project, a group of 12 master trainers will be trained locally.

4. Educating Teachers to Better Serve the Needs of Girls and Other Disadvantaged Groups (Component 4)

65. The general issues of enhanced access to and improved quality of education for girls and other disadvantaged groups are being addressed through BPEP II. Even so, discriminatory treatment and lack of sensitivity on the part of teachers can discourage children from coming to school. Studies have found that lack of sensitivity to the needs of children from disadvantaged groups leads to low enrollment and high dropout rates from such groups. Teachers and administrators will be sensitized to the extent and nature of discrimination, and to ways of minimizing discrimination and enhancing self-esteem among girls and children from disadvantaged groups. This sensitization element is incorporated in the training curriculum to ensure that it is an integral part of the training of trainers and of teachers and administrators.

66. The representation of females and of other disadvantaged groups needs to be increased. At present, only 22.5 percent of primary school teachers are female. One reason cited for this low representation is that the number of candidates available from these groups is not adequate. In the absence of a provision for affirmative action, the recruitment of females and persons from disadvantaged groups cannot be mandated but can only be encouraged. To encourage female candidates and candidates from other disadvantaged groups to enter the teaching force, scholarships for preservice training spread over five years will be given to 2,500 candidates. Preference will be given to candidates from the 12 districts identified as disadvantaged because over 65 percent of the total population there belong to disadvantaged groups. These districts also account for 20 percent of the total population of disadvantaged groups in the country. The Government has assured that priority will be given to female teachers in recruiting for the approximately 3,000 vacancies arising annually mainly due to attrition.

C. Cost Estimates

67. The total cost of the Project is estimated at \$25.9 million equivalent, of which an estimated \$7.2 million, or 28 percent, is the foreign exchange cost, including \$1.1 million interest on the proposed loan. The local currency cost is estimated at \$18.7 million equivalent, or 72 percent of the total cost. A summary of the project cost estimates by component is presented in Table 1.

Table 1: Summary of Project Costs
(\$ million)

Item	Foreign Exchange	Local Currency	Total Cost
A. Base Cost			
1. Building a System for Teacher Education	2.05	2.88	4.93
2. Training Curriculum and Materials	0.59	0.42	1.01
3. Teacher and Management Training	2.72	10.70	13.42
4. Serving Disadvantaged Groups and Girls	0.00	0.71	0.71
5. Taxes and Duties ^a	0.00	1.64	1.64
Subtotal (A)	5.36	16.35	21.71
B. Contingencies			
1. Physical Contingencies ^b	0.27	0.73	1.00
2. Price Contingencies ^c	0.50	1.57	2.07
Subtotal (B)	0.77	2.30	3.07
Total	6.13	18.65	24.78
C. Interest Charges	1.08	0.00	1.08
Total Project Cost	7.21	18.65	25.86

^a Taxes and duties on all Asian Development Bank-financed goods and services estimated at 10 percent plus an additional 1 percent duty on foreign costs.

^b Estimated at 5 percent base cost.

^c Estimated at 2.4 percent per annum on local and foreign costs.

Source: ADB estimates.

D. Financing Plan

68. It is proposed that ADB provide a loan of \$19.6 million from its Special Funds resources to finance up to 76 percent of the project cost. This includes \$7.2 million of the foreign currency cost and \$12.4 million equivalent of the local currency cost. The Government will provide \$6.3 million to finance the remaining local currency costs. The loan will be repayable over 32 years including a grace period of 8 years, with a 1.0 percent interest rate per annum during the grace period and 1.5 percent thereafter. A summary of the financing plan is in Table 2. The detailed project costs and financing plan are in Appendix 5.

Table 2: Financing Plan
(\$ million)

Source	Foreign Exchange	Local Currency	Total Cost	Percent
Asian Development Bank	7.2	12.4	19.6	75.9
Government	0.0	6.3	6.3	24.1
Total	7.2	18.7	25.9	100.0

Source: ADB estimates.

E. The Executing Agency

69. The Project will be implemented over six years. MOES will be the Executing Agency and NCED will be the Implementing Agency. NCED is an agency of the MOES reporting directly to the MOES. The Project will not have an independent interministerial project steering committee. Instead, the functions of the steering committee will be subsumed with those of the program execution board of BPEP II. The board is chaired by the Minister of MOES, and the membership includes high-level representation from NPC, MOF, and concerned departments affiliated with MOES. The membership of the program execution board will be expanded to include NCED and DEC. This arrangement reflects funding agency and Government consensus on closer coordination of the Project with BPEP II as well as better time management for effective implementation.

F. Implementation Arrangements

70. The Project will be implemented by NCED by integrating the project activities within its regular administrative setup. The executive director of the NCED will assume responsibility for the Project. It is hoped that integrating the project implementation functions within the regular administrative structure of NCED will lead to a greater sense of ownership as well as strengthening of the institutional capacity for program implementation. A part-time procurement consultant will be engaged to facilitate the procurement of goods and services under the Project. The position of the accounts officer will be upgraded to senior accounts officer to strengthen the accounts section. To assist NCED in developing the capacity to take on the increased responsibility, a chief technical adviser will be appointed for a duration of three years to assist in strengthening management capabilities within NCED and to help set in motion a well-managed training schedule.

1. Implementation Schedule

71. The Project will be implemented over six years beginning in 2002 and will end in 2007 (Appendix 6). The Government has assured that adequate budgetary provision for the Project will be included in the FY2001/02 budget and thereafter to sustain the project.

2. Procurement of Goods and Services

72. All goods and services for the Project will be procured following ADB's *Guidelines for Procurement*. Contracts for civil works are not estimated to cost more than \$1.0 million equivalent. International competitive bidding procedures will, therefore, not be necessary. Contracts estimated to cost \$1.0 million equivalent or less will be under local competitive bidding procedures. The procurement of goods too does not require the use of international competitive bidding procedures. Miscellaneous minor goods that cost less than \$500,000 per contract will be procured through international shopping. Minor items costing less than the equivalent of \$100,000 per contract may be purchased directly. The tentative procurement packages are shown in Appendix 7.

3. Consulting Services

73. All consultants to be financed by ADB will be selected and engaged in accordance with ADB's *Guidelines on the Use of Consultants* and other arrangements satisfactory to ADB for engaging domestic consultants. A team of 10 international and 15 domestic consultants, based at NCED, will assist in implementing, managing, and monitoring project activities. A total consulting input of 58 person-months international, and 309 domestic is planned. The inputs will help strengthen capacity in NCED, PTTCs, DEC, MOES, and other concerned agencies in a wide range

of operational and management areas such as training methodology, training and materials development, TMIS, monitoring and evaluation, organization management, financial management, and different aspects of distance education delivery and management. An international consulting firm that will be selected according to ADB's guidelines will provide the consulting services. Indicative terms of reference for the consultants are in Appendix 8.

74. The chief technical adviser will collect information on and prepare a shortlist of suitable institutions for international training for staff development. A technical committee headed by the Secretary of MOES, and with representation from MOF, NCED, DEC, and at least three eminent teacher training and management experts will scrutinize the list and make final recommendations, which the Government will submit to ADB for approval. Criteria will be devised for selecting candidates and a committee will be set up to approve candidates according to the criteria. The criteria will specifically lay down preference guidelines for eligible women candidates. Selected candidates will be required to sign a bond pledging service in the institutions according to government norms.

4. Disbursement Procedures

75. MOES will be responsible for preparing disbursement projections and requesting budgetary allocations for counterpart funds. To expedite project implementation, an imprest account for the Project will be established with the Nepal Rastra Bank. The initial amount will be no more than a six-month projected disbursement. The imprest account will be established, managed, and liquidated in accordance with ADB's *Loan Disbursement Handbook*. Statement of expenditures (SOE) procedures may be used to reimburse eligible expenditures not exceeding \$100,000 and to liquidate advances made into the imprest account in accordance with the guidelines. MOES will coordinate the timely release of funds. This is considered essential because project activities will take place at different locations and simple mechanisms are required to disburse small funds quickly through decentralized decision making while maintaining acceptable levels of financial control. The use of the imprest account and SOE procedures will be audited by auditors acceptable to the ADB. A separate audit opinion on the use of imprest account and SOE should be included in the annual audit report.

5. Reports, Accounts, and Audit

76. The Government, acting through MOES, will maintain records and accounts adequate to identify goods and services financed from the loan proceeds. NCED will (i) maintain separate accounts for the Project; (ii) ensure that accounts and financial statements are audited annually, in accordance with sound accounting principles, by auditors acceptable to ADB; and (iii) submit to ADB, not later than 12 months after the close of each fiscal year, certified copies of audited accounts and financial statements, and the report of the auditor on them.

77. MOES, with assistance from NCED, will prepare progress reports at four-month intervals to be submitted to ADB no later than 30 days after the end of each four-month period. The reports will be in a format acceptable to ADB, and will include (i) progress made against established targets, including aspects of quality; (ii) delays and problems encountered, and actions taken to resolve issues; (iii) compliance with loan covenants; (iv) proposed program of activities to be undertaken during the next three months; (v) expected progress during the succeeding period; and (vi) maintenance and repair activities undertaken on facilities. Within three months of physical completion of the Project, the Government will prepare and submit to ADB a project completion report on the execution of the Project including costs and compliance with loan covenants.

6. Midterm Review of the Project

78. The Government and ADB will jointly undertake a midterm review of the Project at the end of the third year of implementation. The review will (i) evaluate the project scope, design, implementation arrangements, and institutional processes; (ii) identify and recommend changes needed in any of the areas mentioned in (i); (iii) review the teacher education policy, including issues related to entry-level qualifications of primary school teachers; (iv) assess the effectiveness of the Project in reducing the backlog of teachers to be trained; (v) evaluate the effectiveness of project strategies for promoting greater participation of females and other disadvantaged groups; (vi) assess the progress of capacity building for NCED, PTTCs, and DEC; (vii) evaluate the coordination between the Project and BPEP II; and (viii) evaluate compliance with procedures and enforcement of quality control mechanisms for procuring civil works and equipment.

7. Benefit Monitoring and Evaluation

79. In accordance with ADB's *Benefit Monitoring and Evaluation: A Handbook*, a shortlist of verifiable indicators for monitoring and evaluation has been selected (Appendix 9). BME comprises activities conducted periodically to gather information through multiple sources so as to determine whether the input deliveries for implementing program activities have rendered expected benefits to the intended beneficiaries. BME also seeks to detect any deficiency and discrepancy between the plan and the execution of a program in using the resources efficiently, so that timely corrections could be made to update the program and thus improve the benefits, outcomes, and impact. BME will utilize information from the EMIS and TMIS, annual and semiannual reviews, midterm reviews, and periodic evaluations and studies.

G. Environmental and Social Measures

1. Environment

80. A review of the environmental implications of the Project showed no adverse environmental impact. The required additional buildings and civil works are limited and do not require any fresh acquisition or allocation of land. Vacant land within the existing complexes of NCED and the PTTCs will be used for any additions and improvements to the facilities. No resettlement will be involved. MOES assured that the site, design, construction, and operations for any improvement made to the physical facilities under the Project would follow ADB's *Environmental Guidelines for Selected Infrastructure Development Projects* and other relevant guidelines. Recognizing the key role education can play in improving environmental awareness among primary school teachers and students, environmental issues have been integrated into the revised basic training curriculum. This integration is expected to have a beneficial impact on environmental protection in the long term.

2. Social Analysis

a. Disadvantaged Groups

81. The Project addresses the institutional and cultural barriers precluding the participation of girls and children from disadvantaged groups. The Project will (i) promote the recruitment and training over a five-year period of an additional 2,500 teachers belonging to disadvantaged groups from 12 districts selected because the majority of their population (65 percent) belong to disadvantaged groups; (ii) emphasize the Government's commitment that preference be given to

female teachers in recruiting for fresh vacancies; (iii) give sensitization training for teachers and administrators, focusing on the extent and nature of discrimination, ways to minimize discrimination and enhance self-esteem among target groups; and (iv) integrate sensitization modules into the regular training curriculum for administrators and teachers. The social assessment of the Project is in Appendix 10.

b. Gender

82. Nepal ranks 119th among 143 countries in United Nations Development Programme's (UNDP) 1998 gender development index (GDI), published in 2000. Nepal ranks low in indicators of human development that have a direct correlation with the status of women. Gender disparity persists in educational attainment, health status, and participation in the decision-making process. Women in Nepal are particularly deprived and severely underprivileged. Gender disparity persists in educational attainment, health status, and participation in the decision-making process. Disadvantaged castes and communities show higher levels of gender disparities in education. The disparities in literacy are significant, with literacy rates of 52 percent for men and 24 percent for women. The gender disparities are equally glaring among the poor, the literacy rates being 32 percent for men and only 9 percent for women. While efforts are being made to improve the status of women, there are constitutional and legal obstacles to equal status for women. For example, women are treated unequally under the inheritance laws. Women also suffer from trafficking and violence. While women have made substantial gains in education, and the female literacy rate has risen from 4 percent in 1971 to 24 in 1996, the gender gap in terms of the percentage of graduates at various educational levels is rising. The Government has expected efforts to close the gender gap as well as to improve the status of women through various development programs. The results, however, are likely to remain limited unless the gender bias in the social system is reduced, if not eliminated.

83. The goal to raise the representation of females among primary school teachers can at best be modest. Out of approximately 90,000 primary school teachers, only 22.5 percent are female. It is estimated that each year there will be 3,000 vacancies mainly due to attrition. Even with optimum recruitment of females for these vacancies, gender parity in the teaching force will not be possible for another decade. The Project will promote the recruitment of females, particularly from disadvantaged groups, by providing scholarships to 2,500 potential candidates over a five-year period to undergo preservice training. Through this intervention, the number of eligible female candidates entering the teaching profession will be increased. This also responds to a felt community need for greater representation of females and disadvantaged groups in the teaching force in primary schools.

c. Poverty

84. Despite four decades of planned development, Nepal ranks among the poorest countries in the world. Taking a broader view of human deprivation than the simple income measure, Nepal ranked 144th out of 174 countries in UNDP's 2000 Human Development Report. An estimated 42 percent of the country's population remains below the poverty line. Due to lack of comparable data, it is difficult to assess the trends in the poverty rate over time, but it appears that there has not been any reduction in poverty in the last 20 years, despite increases in life expectancy. In fact, indications are that, because of the rising population, the absolute number of the poor almost doubled during this period.¹¹ Income distribution too is becoming increasingly unequal over time. Average household income widely varies by geographic area and the disparity between urban and

¹¹ Nepal South Center. 1998. *Nepal Human Development Report*. Kathmandu.

rural areas is also large. Many factors have constrained the reduction of poverty and income inequality: (i) inequitable land distribution, (ii) caste and gender bias, and (iii) erratic and low economic growth along with high population growth. These disparities translate into acute disadvantage in access to public services such as education and health that precludes meaningful participation of the poor in the economic and social spheres. Despite 300 percent increase in literacy during 1971-1991, the literacy rate in Nepal remains at 38 percent. Only 20 percent of the poor are literate, compared with 60 percent among the higher income groups.

85. The burden of poverty has a negative impact on the lives of children of school age, depriving them of the opportunity to go to school and forcing them prematurely into labor. Of 6.23 million children aged 5-14 years, an estimated 42 percent (2.6 million) regularly work, and about 21 percent either are idle or work infrequently. Only 37 percent attend school and do not work. The number of working children is higher among girls, estimated at 48 percent compared with 36 percent for boys. While the proportion of economically active children declined between 1981 and 1991, boys benefited more than girls did from this transition, as indicated by the increased school enrollment of boys. Of all working children, approximately 61 percent go to school.

86. Poverty is a major impediment to development. Poverty reduction is, therefore, a key goal in the development process. The Ninth Plan proposes poverty reduction through (i) sustained and broad-based growth, (ii) development of rural infrastructure and social priority sectors, and (iii) specific programs that target the poor. The Government has further reinforced its commitment to poverty reduction by mandating the NPC to prepare a poverty reduction strategy paper. All these efforts notwithstanding, improving access to basic services such as education and health remains critical to poverty reduction.

V. PROJECT JUSTIFICATION

A. Socioeconomic Analysis

1. Demand Analysis

87. Enrollments in primary schools have grown significantly. Net enrollments at the primary level are expected to be close to 100 percent by the end of the 12th Plan in 2017. It is important to match the increase in enrollments with a well-qualified, trained, and dedicated teaching force. Presently, of the 85,000 primary school teachers in the country, only 156 teachers have completed the 10-month training package and 32,000 have no training of any kind. According to the social assessment survey commissioned during project preparation, parents noted the lack of trained teachers and teachers' lack of cultural sensitivity. Large-scale quality improvement interventions are under way through BPEP II to improve the quality of primary education through improved facilities, management, and administration of primary education. Teacher training, however, has received limited attention under BPEP II. In the past, ADB supported teacher training through PEDP by establishing NCED and the PTTCs. Continued support for teacher training will not only fill a critical gap but also is in line with ADB's strategy of providing continuing support to sustain prior investments. Besides, teachers are the most critical input in primary education. The importance of teacher quality can be gauged from the fact that teacher salaries account for approximately 95 percent of the budget for primary education. Neglecting issues of teacher quality results in poor utilization of scarce resources. The Project will assist the Government in its efforts to improve the quality of primary education by focusing on the critical area of teacher quality.

2. Economic Benefits

88. The major economic benefits of the Project accrue from its contribution to improvements in the internal efficiency of primary education as reflected in the reduced dropout and repetition rates of primary school students, since better qualified teachers will have greater knowledge and improved teaching skills (Appendix 11). The dropout rate will fall from 13 percent to 12.6 percent and the repetition rate will decrease from 24.5 percent to 23.3 percent. Improved teacher training will also increase learning and raise achievement levels. This, in turn, will enhance the quality of entrants to the labor force and, thereby, have a positive impact on Nepal's economy. Long-term benefits from the Project, which have not been quantified, include greater representation of females and other disadvantaged groups in the workforce, and improved human development indicators such as reduced fertility rates and improved health outcomes.

B. Social Dimensions

89. The Project is designed to improve the quality of primary education through the supply of teachers with improved knowledge and teaching skills. This will result in reduced dropout and repetition rates that directly impact the less advantaged groups. Improved quality of primary education will also lead to increased enrollments, which will directly impact groups hitherto excluded from participation in education. The Project has also been designed to have direct social benefits on the enrollment and retention of girls and other disadvantaged groups by (i) promoting the recruitment of teachers from these groups; and (ii) incorporating sensitization to the needs of children from disadvantaged groups, particularly girls, into the training curriculum for teachers as well as administrators.

90. The direct beneficiaries of the Project will be the primary school teachers who will receive training and thus will have upgraded their skills. In all, 32,000 teachers will complete the basic training package, 41,000 will complete the integrated second and third packages, and 34,000 will complete the entire 10-month training package. Additional 15,000 teachers will receive preservice training and 2,500 persons, from disadvantaged groups will have undergone preservice training with incentive fellowships under the Project. Preference will be given to females from disadvantaged groups. The real beneficiaries, however, will be (i) the student population in primary schools countrywide, current and future, who will benefit from improved quality of teaching, (ii) girls and students from disadvantaged groups who will continue to benefit from increased representation of women and disadvantaged groups in the primary school teaching force, and (iii) society at large through a better educated population and improved indicators of human development.

C. Sustainability

91. The Project will generate minor continuing additional incremental recurrent cost after the project period. The Government has agreed to sustain the Project into the future after its completion by making the necessary budgetary provisions. The certificate training for all in-service teachers will not be completed over the six-year project cycle. Approximately 37,794 teachers will receive training in package 4 over three years and approximately 18,700 will receive training in the integrated packages 2 and 3 through the distance mode. Though an additional \$4.5 million will be needed for this purpose over a three-year period, actual additional recurrent cost is minor and the Government is committed to making adequate budgetary provision for this. Resources for education, both from internal as well as external sources, are expected to increase in the years to come. Besides, basic education is currently in an expansion phase. As consolidation begins,

resource allocation within education will be rationalized. As indicated in para. 13, the Government's budgetary allocations for education have risen by an average 3 percent since 1990.

D. Impact on Poverty

92. The Government has identified ensuring access to basic services, including basic education, as a key intervention for poverty reduction. The proposed Project has been conceived to improve the quality of classroom teaching by assisting the Government in designing long-term strategies for teacher training, and strengthening the institutional infrastructure necessary to support these strategies. Improved quality of basic education is expected to lead to increased enrollments and retention and reductions in the dropout rate. Project interventions will reduce the dropout rate from 13 percent to 12.5 percent and in the repetition rate from 24.5 to 23 percent. These gains will accrue to children that are currently out of school or vulnerable to grade repetition or dropping out of school. The distribution of benefits from improvements in the quality of basic education will be toward children of poor families that are attending school.

93. The Project will also increase access to education for women and other disadvantaged groups by (i) sensitizing the teachers and administrators to the needs of these groups of students, and (ii) promoting greater representation of teachers from these groups in the teaching force by providing candidates with fellowships for preservice training. Improved basic education will also lead to improved learning outcomes, thereby producing a better educated workforce capable of contributing meaningfully to the economic and social fabric of society. Hence, the Project will have a strong and positive, direct and indirect impact on all children enrolled in primary schools but particularly on the poor and socially disadvantaged groups. The poverty reduction impact of the Project is substantial.

E. Risks

94. The training system for primary school teachers in Nepal is characterized by diverse training philosophies, curricula, training institutions, as well as lack of a coherent training policy and weak institutional support. Pulling together these diverse threads to forge an effective, efficient, and sustainable system for teacher training is a challenge with certain inherent risks. Dialogue with the Government and related agencies has focused on issues that could have a negative impact on project outcomes. The following risks are anticipated.

- (i) Lack of commitment to enforcing preservice training requirements. Emphasis on in-service training, as opposed to preservice training, and the continued intake of untrained teachers into schools make for an unsustainable situation. It is critical that the Government manifest a strong commitment to enforcing mandatory preservice training. To mitigate this risk, the TMCC will initiate the formulation of a comprehensive policy for teacher training and set a time frame for its validation by the Government.
- (ii) Lack of coordination among the teacher training institutions and DOE, DEOs, and RCs in selecting and placing teachers for training. The Project will mitigate this risk by establishing functional coordination committees at the national and regional levels. These committees will represent the training institutions and the administrative offices concerned to ensure that functional coordination mechanisms are in place at the start of the project.

- (iii) Lack of leadership and commitment on the part of heads of institutions. To mitigate this risk, criteria for selecting heads of NCED and PTTCs will be established in consultation with ADB, and the heads will be appointed for a stable tenure of at least three years.
- (iv) Lack of stable tenure for personnel at the training institutes. To ensure that capacity building inputs are fully utilized and a professional cadre of training personnel emerges, it is necessary that institutional staff strength reflect staff requirements. At present, NCED and the PTTCs have some temporary positions. These must be converted to permanent ones to justify investments in upgrading staff skills, some of which are specific to institutional needs. There is a risk that investments in staff development could be wasted if staff morale is low due to temporary employment, or if staff is moved into other organizations. To mitigate this risk, the Government has assured that the temporary positions will be converted to permanent ones.

VI. ASSURANCES

A. Specific Assurances

95. The Government has given the following assurances in addition to the standard assurances, which have been incorporated in the legal documents.

- (i) Within three months of loan effectiveness, the following actions will have been taken:
 - (a) The program execution board of BPEP II will be expanded to include NCED and DEC, and will act as the Steering Committee for the Project;
 - (b) MOES will expand the staff levels within NCED by engaging a part-time procurement consultant for a total of six months, and by upgrading the position of senior accounts assistant to accounts officer;
 - (c) NCED will establish a training coordination committee at the national level and zonal training coordination committees at the PTTC level, to liaise with relevant agencies and officers regarding teacher selection, training, and supervision;
 - (d) the PTTCs will, in accordance with guidelines from NCED, select the HSSs and university campuses that will offer training;
 - (e) MOES will establish a technical committee, chaired by the secretary of MOES, and including representatives of MOF, NCED, DEC and at least three eminent teacher training and management experts, to make recommendations for selecting international training institutions, develop the criteria for selecting candidates for international training, and oversee the selection of candidates for such training. The criteria shall include guidelines for the encouraging eligible female candidates; and
 - (f) NCED shall develop a list of criteria for eligibility for scholarships to be provided under the Project.

- (ii) Within six months of loan effectiveness, the following actions will have been taken:
 - (a) the Government will convert all temporary positions in NCED and PTTCs to regular positions, and appoint personnel with a stable tenure of at least two years;
 - (b) the TMCC will develop, and MOES will approve, a final teacher education policy;
 - (c) MOES will design a package of incentives to encourage already recruited teachers to participate in the 10-months training program;
 - (d) the PTTCs will establish mobile training units, which will include at least one female trainer as well as trainers from the target group; and
 - (e) NCED will prepare baseline data for evaluating the Project's achievements.
- (iii) In addition to the preceding time-bound activities, the Government has assured that
 - (a) all teachers to be recruited for primary schools will have successfully completed the 10-months training program;
 - (b) MOES will take all necessary measures to increase the number of female teachers and teachers from other disadvantaged groups. This means priority recruitment of candidates from districts where vacancies are advertised; the strict implementation of the provisions in the Education Regulations according to which each school will have at least one female teacher; and measures to encourage the application for scholarships from those groups;
 - (c) the Government will prepare a maintenance plan for all facilities extended, upgraded, or renovated under the Project, and will make the necessary budget available to fund their maintenance;
 - (d) all design, extension, upgrading, renovation, and operations of facilities under the Project will follow the Government's environmental requirements, ADB's *Environmental Guidelines for Selected Infrastructure Development Projects*, and other ADB guidelines on the environment; and
 - (e) the Government and ADB will jointly undertake a midterm review at the end of the third year of project implementation.

B. Condition for Loan Effectiveness

96. For the loan to become effective, TMCC will have reviewed and adopted the preservice and in-service training curriculum taking into account the recommendations of TA 3217-NEP: Basic Education Project.

C. Condition for Loan Disbursement

97. Before loan disbursement, the Government will have approved the revised administrative structure of NCED and PTTCs, and will have appointed the executive director of NCED and the principals of the PTCCs. Such appointments will be for a stable tenure of at least two years, and in accordance with guidelines developed by MOES.

VII. RECOMMENDATION

98. I am satisfied that the proposed loan would comply with the Articles of Agreement of the Asian Development Bank and acting in the absence of the President, under the provisions of Article 35.1 of the Articles of Agreement of ADB, I recommend that the Board approve the loan in various currencies equivalent to Special Drawing Rights 15,585,000 to the Kingdom of Nepal for the Teacher Education Project, with a term of 32 years, including a grace period of 8 years, and with an interest charge at the rate of 1 percent per annum during the grace period and 1.5 percent per annum thereafter, and such other terms and conditions as are substantially in accordance with those set forth in the draft Loan Agreement presented to the Board.

Myoung-Ho Shin
Vice-President

23 August 2001

APPENDIXES

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SUPPLEMENTARY APPENDIX

(available upon request)

A	Project Components
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PROJECT FRAMEWORK

Design Summary	Performance Target	Monitoring Mechanisms	Risks/Assumption
<p>Sector Goal:</p> <p>Improvement in overall quality and efficiency of the primary education subsector</p>	<ul style="list-style-type: none"> Dropout rate decreased from 13 percent to 12.5, and repetition rate from 24.5 percent to 23. Grade 5 pass rates increase from 72 percent to 77. Teachers trained in the basic package increased from 43 percent to 100 percent. 	<ul style="list-style-type: none"> EMIS Project monitoring data 	<ul style="list-style-type: none"> Basic education continues to be a Government priority.
<p>Purposes:</p> <p>a. Build capacity for policy, planning, management, and delivery of teacher training</p> <p>b. Enhance professional skills of teachers and trainers</p> <p>c. Promote representation of females and other disadvantaged groups in the teaching cadre</p>	<ul style="list-style-type: none"> 130 professional staff from NCED, PTTC, and DEC are trained in job-related competencies through multiple training modalities. Training of targeted number of <ul style="list-style-type: none"> teachers (115,700 teachers receive training of varying durations); trainers (1,480 trainers and 70 master trainers are trained) Student learning outcomes are improved. 2,500 candidates from among women and other disadvantaged groups are provided fellowships for preservice training to allow for increased intake of teachers from these groups. 	<ul style="list-style-type: none"> Project monitoring data Project monitoring data Studies of training impact Student learning evaluations MOES statistics Project monitoring data 	<ul style="list-style-type: none"> MOES commitment to teacher training remains strong. A comprehensive training policy is formulated. Staff tenure at NCED, PTTC, and DEC is stable. Teachers are available for training. Supervision and follow-up of trained teachers are adequate. MOES commitment to recruitment of female teachers is strong.
<p>Outputs</p> <p>1. An effective and sustainable system for teacher education is established through:</p> <p>a. Strengthened professional skills of personnel</p>	<ul style="list-style-type: none"> NCED, PTTC, and DEC administrative and management functions are improved as evidenced by training schedules being followed, and streamlined administrative procedures. 	<ul style="list-style-type: none"> Project monitoring data 	<ul style="list-style-type: none"> Selected staff are released for training. Stable staff tenure at NCED, PTTC, and DEC.

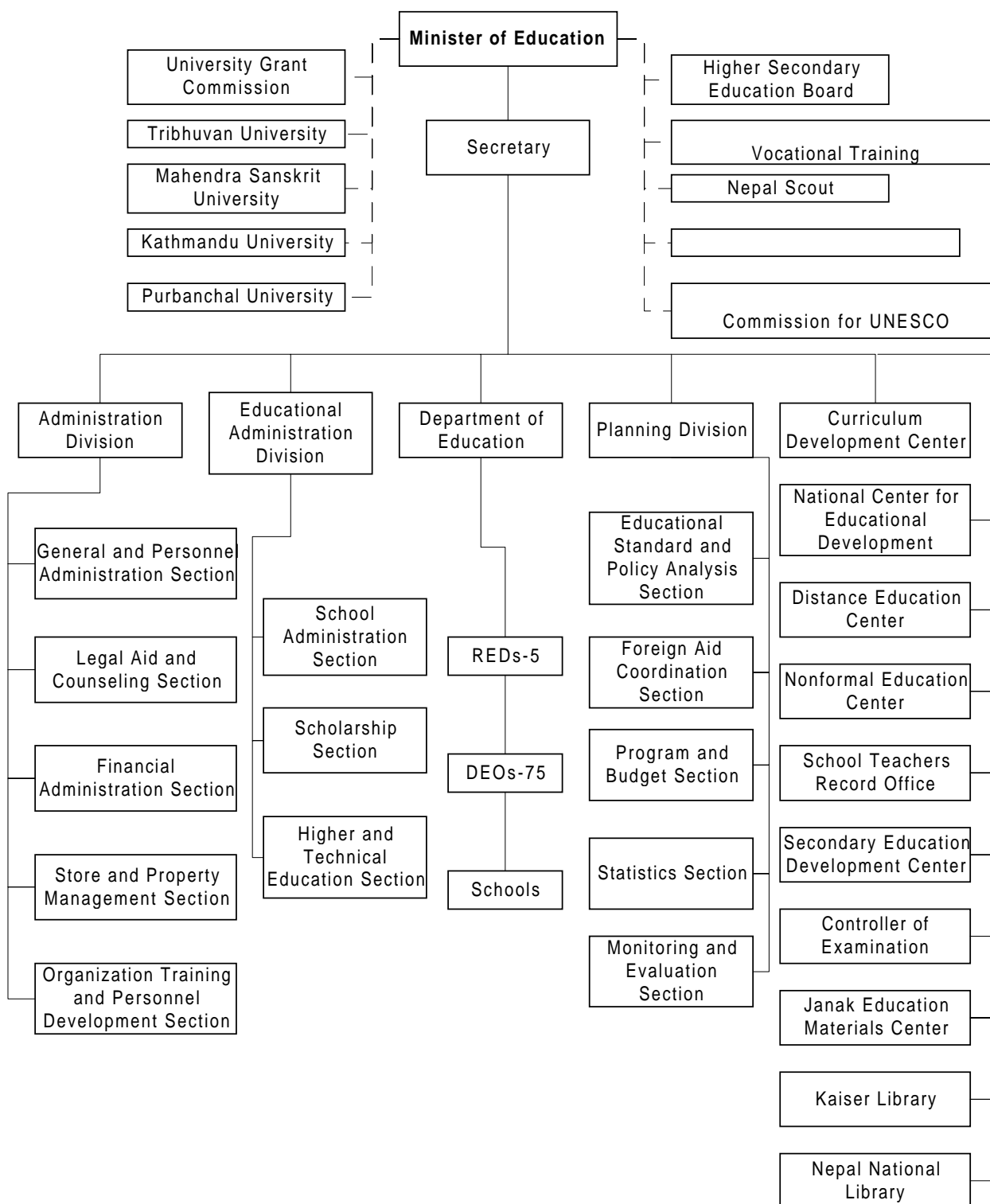
Design Summary	Performance Target	Monitoring Mechanisms	Risks/Assumption
<p>b. Designed and operationalized monitoring and evaluation system</p> <p>c. NCED undertaking accreditation, licensing, and evaluation</p> <p>d. Enhanced skills of staff in institutions imparting training</p> <p>e. Improved physical infrastructure</p> <p>2. Effective teacher education curriculum and materials are prepared.</p> <p>3. Teachers, trainers, and management personnel are trained.</p> <p>a. Master trainers, trainers, and teachers are trained.</p>	<ul style="list-style-type: none"> • TMIS information is collected, analyzed, and disseminated. • Improved quality of incoming teachers is ensured through certification of minimum qualifications. • NCED, PTTC, and DEC personnel are trained using multiple modalities. 102 receive in-country training and 28 obtain international training. • NCED training resource center is established. • Need-based improvements and additions are made to existing NCED and PTTC infrastructure. • DEC recording facilities are renewed and refurbished. • Learning materials are used in delivering training and are activity-based. • 1,480 trainers receive training. • 70 master trainers are trained. • Teaching content and delivery skills are improved through <ol style="list-style-type: none"> (i) 32,000 teachers trained in package 1. (ii) 45,000 teachers trained in packages 2-3. (iii) 34,400 teachers trained in package 4. 	<ul style="list-style-type: none"> • Project monitoring data • Sample reports • Project monitoring data • Project monitoring data • Project monitoring data • Project monitoring data • Studies of training impact 	<ul style="list-style-type: none"> • Coordination between institutions responsible for administration and training is adequate. • Government commitment to pre-service teacher training is strong. • Selected staff are released for training, and have stable tenure. • Quality civil works contractors are available and selected. • Supervision and feedback mechanisms are well-coordinated between the administrative and training institutions.

Design Summary	Performance Target	Monitoring Mechanisms	Risks/Assumption
<p>b. Education administration officials and primary school principals are trained.</p> <p>4. Educated teachers who can better serve the needs of disadvantaged groups and girls</p> <p>a. Eligible candidates from disadvantaged groups, particularly females, are provided fellowships for pre-service teacher training.</p> <p>b. Teachers and administrators are sensitized to the needs of disadvantaged groups and girls.</p>	<ul style="list-style-type: none"> 100 administration officials and 500 primary school principals are trained annually. 2,500 eligible candidates are awarded fellowships for preservice training. The sensitization package is prepared and integrated into the training curriculum to raise awareness of the needs of disadvantaged groups. 	<ul style="list-style-type: none"> Project monitoring data Project monitoring data Project monitoring data 	<ul style="list-style-type: none"> The Government committed to give priority in teacher employment to disadvantaged groups, particularly females. Selected staff are released for training and have stable tenure. Selected staff are released for training and have stable tenure The Government committed to raising enrollments among the disadvantaged groups, particularly females. Adequate number of eligible candidates are available and will apply. Social environment is conducive and receptive to these efforts.
<p>Inputs:</p> <ol style="list-style-type: none"> Civil works Equipment and furniture Instructional materials Program development and studies Staff development Consulting services Program implementation 		<ul style="list-style-type: none"> Project monitoring data and other progress reports Reports on staff development programs Project accounts 	<ul style="list-style-type: none"> Counterpart funds are provided on a timely basis. Procurement and contracting arrangements are well-managed. Capacity of MOHE staff is strong.

DEC = Distance Education Center, EMIS = education management information system, MOHE = Ministry of Higher Education, MOES = Ministry of Education and Sports, NCED = National Center for Education Development, PTTC = primary teacher training centers, TMIS = teacher management information system.

Source: ADB estimates.

ORGANIZATION CHART MINISTRY OF EDUCATION AND SPORTS



MAJOR EXTERNAL ASSISTANCE TO THE SCHOOL EDUCATION SECTOR IN NEPAL

Project Title and Period	Source of Funding	Amount (\$)	Project Objectives and Achievements	Major Lessons Learned	Lessons Learned and Incorporated in Project Design
Basic Primary Education Project I (BPEP) (1992-1999)	World Bank, Danida UNICEF Govt. of Japan, HMGN	31.0 million 11.1 million 3.1 million 15.0 million ^a 8.2 million	<ul style="list-style-type: none"> Improving the quality of primary education Increasing equitable access to educational resources Strengthening the management of the formal and nonformal primary education delivery system management 	<ul style="list-style-type: none"> Although BPEP laid the foundation for an efficient delivery system to improve the quality of education, it did not accomplish substantial improvements in the learning achievements of students. Parents and local communities must be closely involved in delivery of educational services if the needs of diverse groups are to be met. Ensuring communities' sense of ownership in school construction and involvement in school, management and teacher monitoring are essential for increasing accountability. Aid agency cooperation can be effective provided firm funding commitments and supervision arrangements are agreed to before implementation begins. Interventions to increase girls' enrollment and retention through appointment of female teachers, strengthen in-service teacher training, and integrating project management structures into MOES will not be sustained unless there are clear reinforcing policies. 	<ul style="list-style-type: none"> The project aims at improving teacher competencies through provision of comprehensive training to improve knowledge of the subject content as well as pedagogical skills, which are expected to raise learning outcomes. Parents and local communities were involved in assessing the needs of students from disadvantaged groups during the project preparatory stage. School management and teacher monitoring are the responsibility of DOE, DEOs, and RCs, and are coordinated through BPEP II. The Project has designed coordination mechanisms between these offices and the teacher training institutions for feedback. ADB is the only donor for this Project but given the complementarity of objectives with BPEP II donor coordination mechanisms have been discussed at length and incorporated as necessary. A coordinated and comprehensive policy has been emphasized and will be developed under the Project.
Primary Education Development Project (PEDP)	ADB Govt. of Norway, HMGN	19.5 million ^b 1.4 million 4.9 million	<ul style="list-style-type: none"> Establishment of the National Center for Educational Development and nine primary teacher training centers 	<ul style="list-style-type: none"> Critical capacity building, particularly of new institutions, should be undertaken in advance of project activities. 	<ul style="list-style-type: none"> Capacity building needs of the institutions have been assessed and are being addressed through a comprehensive staff development plan.

^a Japan's original financing did not materialize; however JICA provided construction materials for school construction (actual figure not available).

^b Altogether \$13.6 million was disbursed.

(1991-2000)			<ul style="list-style-type: none"> • Developing teacher training curricula and materials • Training of management personnel, teacher trainers and teachers • Assisting the faculty of Tribhuvan University to prepare qualified teachers for the primary education sector 	<ul style="list-style-type: none"> • Institutional strengthening needs to be given greater emphasis. New institutions should have access to critical inputs like consultant services during the formative stage to develop and effectively discharge their responsibilities. • The provision of pre-service training should have been given priority in the Project design to ensure availability of trained teachers for entry into the training cadre. • Given the lack of in-house engineering capability at MOE, ADB should not have agreed to change the implementing agency for the construction component from MHPP to MOE. • As appraised, ADB should have insisted that the Government recruit the project manager with engineering background rather than an administrative background, given the huge construction component. • Changes in classroom practices and teaching behavior cannot occur without a system of consistent teacher follow-up, monitoring, and on-site professional support. • Coordination mechanisms be established with other interventions in the sub-sector which have a bearing on teacher training. 	<ul style="list-style-type: none"> • 64 person-months of international experts and 305 person-months of domestic experts are being provided for staff development at the teacher training institutions. • The Project supports pre-service training by identifying and assisting institutions for pre-service training. 15,000 candidates will receive pre-service training during the first five years of the project cycle including 2,500 candidates from among women and other disadvantaged groups who will be provided fellowships to increase the representation of such groups in the teaching profession. • The construction component is small but this will not be repeated. • Not applicable since the construction component is very small. • Mechanisms for close coordination with BPEP II have been incorporated in the Project design.
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Basic Primary Education Project II (1999 – ongoing)	World Bank Danida NORAD European Union FINNIDA HMGH	12.5 million ^c 36.7 million equiv. ^d 21.7 million equiv. ^e 18.7 million ^f 3.8 million ^g 5.0 million ^h	<ul style="list-style-type: none"> • Strengthening institutional capacity • Raising learning achievement • Increasing equitable access 	<ul style="list-style-type: none"> • Early phase of implementation • Low disbursement 	
Secondary Education Development Project (1992-2000)	ADB DFID HMGH		<ul style="list-style-type: none"> • Curriculum and textbook development for grades 6-10 • Examination reform • In-service training of about 13,000 secondary school teachers • Improvement of science facilities in 25 selected higher secondary schools • Provision of science equipment, learning materials and library books to 1,000 secondary schools • Improvements in management and planning • Staff development • Research and benefit monitoring and evaluation (BME). 	<ul style="list-style-type: none"> • Project implementation suffered intermittently when there was frequent change of project leadership. • Regularization of positions needs to be completed before loan negotiation. • Serving teachers can be good trainers, but need to be used with due care taking into account the impact on their schools and their careers. • Curriculum reform should proceed with the total school system rather than with limited subject scope. • Institutional needs and preferences need to be recognized and addressed in supply of physical facilities, equipment, and learning materials. A standard set or type will not meet the individual school requirements. • The classroom environment cannot be improved without improving the school management system. Parents group should be involved and made responsible in supervising schools. 	<ul style="list-style-type: none"> • Stable tenures for institutional staff are being emphasized and Government assurance to the same being obtained. • Dialogue is ongoing with Government to initiate the process of making temporary positions permanent. • Has been noted. • Not applicable. • Not applicable. • Being addressed through BPEP II

^c IDA loan was approved under the adaptable program loan (APL) for 10 years. The loan is divided into three phases: first phase \$12.5 million, second phase \$15.0 million, and third phase \$22.5 million. Under this approach, there are triggers for moving from phase 1 to 2 and 3.

^d Danish kroner 300.0 million.

^e Norwegian kroner 195 million.

^f Euro 20.5 million.

^g Finnish markka 25.0 million.

^h Excluding recurrent expenditure of \$279.5 million.

Science Education Project (1982-1991)	ADB UNDP HMGN	5.8 million 1.8 million 1.6 million	<ul style="list-style-type: none"> Establishing 25 secondary education development units Strengthening six campuses of Tribhuvan University Providing science equipment to 700 secondary and lower secondary schools Establishing a science education development center Assistance to the Science Equipment Center of Janak Education materials Center 	<ul style="list-style-type: none"> BME activities should be included under the loan financing rather than cofinanced or grant-financed by other sources. Cooperative and coordinating arrangements among different agencies involved in implementation should be clearly established and agreed to by all parties during project formulation. Appropriate provision in project scope must be made to include women, most disadvantaged group, during appraisal. 	<ul style="list-style-type: none"> Being done Coordination mechanisms have been discussed, designed, and incorporated. Done
Technical Education and Vocational Education Project (1989-1997)	ADB Govt. of Switzerland OPEC HMGN	12.6 million 4.4 million 1.5 million	<ul style="list-style-type: none"> Establishing four new technical schools and upgrading one additional technical school Institutional development of the Council of Technical Education and Vocational Training Development of skills testing 	<ul style="list-style-type: none"> Given the difficulty of retaining capable instructors in remote areas, it is important to establish the credibility of a rotation system based on recognition of individual work performance. Engagement of professionals as instructors for modern technology subjects would be better than retaining permanent instructors, given the inflexible reward system, the risk of high turnover and the need for constant upgrading of instructors' skills. 	<ul style="list-style-type: none"> Not applicable Does not apply at the primary school level

ADB = Asian Development Bank, Danida = Danish International Development Assistance, DEO = distance education officer, DFID = Department for International Development, DOE = Department of Education, FINNIDA = Department for International Development Corporation (formerly Finnish International Development Agency, HMGN = His Majesty's Government of Nepal, MOE = Ministry of Education, MOES = Ministry of Education and Sports, NCED = National Center for Education Development, NORAD = Norwegian Agency for Development, OPEC = Organization of Petroleum Exporting Countries, RC = resource center, UNICEF = United Nations Children's Fund.

STAFF DEVELOPMENT PLAN

Component Subcomponent Description	Category	Type	Duration	Participants	Number	Suggested Venue	Trainer
A. TMCC - Policy development	International	Study tour	2 weeks	Member of TMCC	6	-	-
B. NCED							
1. Improvement of TMIS	International	Training	2 months	NCED, PTTC	3	Regional	-
2. Improvement of TMIS	Domestic	Training	2 months	NCED, PTTC, DEC, MOES	13	NCED	Consultant
3. Monitoring and evaluation	Domestic	Training	1 month	NCED, DEC, PTTC, MOES	20	NCED	Consultant
4. Master trainers training							
- Trainers training	Domestic	Training	1 month	NCED, DOE, DEC, FOE	15	NCED	Consultant
- Training material development	Domestic	Training	1 month	NCED, DOE, DEC, FOE, CDC, SEDC	15	NCED	Consultant
- Training in assessment (quality and impact)	Domestic	Training	1 month	NCED, DOE, DEC, FOE, SEDC, CDC	15	NCED	Consultant
- Training in assessment	International	Training	3 months	NCED, PTTC, MOES	3	-	-
5. Training methodology	International	Training	3 months	NCED, PTTC	12	-	-
6. Training in organization management							
7. Implementation training	International	Training	3 months	NCED, MOES	4	-	-

Component Subcomponent Description	Category	Type	Duration	Participants	Number	Suggested Venue	Trainer
<ul style="list-style-type: none"> - Policy level - Middle level - Operational level - Financial management 8. Training Resource Center management	Domestic	Training	3 days	MOE, NCED, DOE, DEC, FOE, SEDC, CDC, HSB	30	NCED	Consultant
	Domestic	Training	5 days	MOE, NCED, DOE, RED, PTTC, DEO	75	NCED	Consultant
	Domestic	Training	5 days	MOE, NCED, DEO, PTTC, HSS	100	NCED	Consultant
	Domestic	Training	7 days	NCED, PTTC, DEC	14	NCED	Consultant
	International	Internship	2 months	NCED	1	Regional	-
C. Government PTTCs							
- Training of trainers	In-country	Training	2 weeks	PTTC, RED, DEO	70	NCED, PTTC	Master trainers
- Refresher training for trainers	Domestic	Training	1 week	PTTC, RED, DEO	210	NCED, PTTC	Master trainers
D. Distance Education Center							
1. Studio maintenance	Domestic	Training	1 month	DEC	5	DEC	Consultant
2. Sound engineering	International	Training	2 months	DEC	1	Regional	-
3. Script writing	International	Training	2 months	DEC	2	Regional	-
4. Distance education teacher training	International	Training	2 months	DEC	2	Regional	-
5. Distance education management	Domestic	Training	1 month	DEC	4	DEC	Consultant
6. Distance education management	International	Internship	2 months	DEC	2	Regional	-

Component Subcomponent Description	Category	Type	Duration	Participants	Number	Suggested Venue	Trainer
E. Private PTTCs, HSSs and University Sector							
1. Training of trainers for in-service training	Domestic	Training	2 weeks	Trainers from private PTTCs, HSSs, and other institutions	1,480	NCED, PTTC	Master trainers
2. Refresher training for trainers	Domestic	Training	1 week	Trainers from private PTTCs, HSSs, and other institutions	380	NCED, PTTC	Master trainers
3. Trainers training for pre-service teacher training	Domestic	Training	4 weeks	Trainers from private PTTCs, HSSs, and other institutions	240	NCED, PTTC	Master trainers
4. Refresher training	Domestic	Training	1 week	Trainers from private PTTCs, HSSs, and other institutions	110	NCED, PTTC	Master trainers

CDC = Curriculum Development Centre, DEC = Distance Education Center, DOE = Department of Education, FOE = Faculty of Education, HSS = higher secondary schools, MOES = Ministry of Education and Sports, NCED = National Center for Education Development, PTTC= primary teacher training centers, RED = regional education directorate, SEDC = Secondary Education Development Centre, TMCC = training management and coordination committee, TMIS = teacher management information system.

DETAILED PROJECT COSTS AND FINANCING PLAN**Table A5.1: Financing Plan**

(\$'000)

Activity	Asian Development Bank			Govt Local Currency	Total		
	Foreign Exchange	Local Currency	Total Cost		Foreign Exchange	Local Currency	Total Cost
A. Base Cost							
1. Civil Works	173	533	705	0	173	533	705
2. Equipment and Furniture	207	93	300	119	207	212	419
3. Instructional Materials	851	267	1,118	0	851	267	1,118
4. Program Development and Studies	13	542	555	66	13	608	621
5. Staff Development	314	937	1,251	0	314	937	1,251
6. Consulting Services	1,169	908	2,077	0	1,169	908	2,077
7. Program Implementation (Training)	2,628	7,094	9,722	3,467	2,628	10,561	13,189
8. Incremental Recurrent Costs							
Remuneration	0	148	148	110	0	258	258
O&M of Civil Works/ Equipment	0	259	259	174	0	432	432
Subtotal (A)	5,354	10,780	16,134	3,936	5,354	14,716	20,070
B. Contingencies							
1. Physical Contingencies	268	539	807	197	268	736	1,004
2. Price Contingencies	497	1,095	1,592	472	497	1,566	2,064
Subtotal (B)	765	1,634	2,399	668	765	2,302	3,067
C. Interest	1,085	0	1,085	0	1,085	0	1,085
D. Taxes and Duties				1,636		1,636	1,636
Total	7,204	12,414	19,618	6,240	7,204	18,655	25,858
Percent	36.72	63.28	75.87	24.13	27.86	72.14	100.00

O&M = operation and maintenance.

Source: ADB estimates.

Table A5.2: Project Cost by Component and Financing Plan
(\$'000)

Component/Subcomponent	Foreign Exchange	Local Currency	Total Cost
A. Base Cost			
Component 1: Building a System for Teacher Education			
1.1 Strengthened TMCC	0	10	10
1.2 TMCC secretariat established at NCED	22	23	45
1.3 Teacher management information system	34	4	38
1.4 Program coordination process established	0	17	17
1.5 Monitoring and evaluation	60	98	158
1.6 Accreditation and certification	50	28	78
1.7 Enhanced capacity of NCED	1,464	573	2,037
1.8 Enhanced capacity of Government PTTCs	225	1,222	1,447
1.9 Enhanced capacity of DEC	192	131	323
1.10 Enhanced support to private PTTCs, HSS, and FOEs	0	462	462
1.11 Government financing	0	311	311
Subtotal (Component 1)	2,047	2,879	4,927
Component 2: Training Curriculum and Materials			
2.1 Basic training package	110	57	167
2.2 Teacher training packages 2-3 and 4	360	107	467
2.3 Preservice training package	0	126	126
2.4 Management training package	51	75	126
2.5 Multigrade training package	68	19	87
2.6 Government financing	0	40	40
Subtotal (Component 2)	589	423	1,012
Component 3: Teacher and Management Training			
3.1 Deliver in-service training	2,335	6,499	8,834
3.2 Management training for education personnel	139	183	322
3.3 Preservice training	243	497	741
3.4 Government financing	0	3,523	3,523
Subtotal (Component 3)	2,718	10,703	13,420
Component 4: Serving Disadvantaged Groups and Girls			
4.1 Increased teachers from ethnic minority and disadvantaged groups	0	501	501
4.2 Culture and gender sensitization of teachers	0	148	148
4.3 Government financing	0	62	62
Subtotal (Component 4)	0	711	711
Subtotal (A)	5,354	14,716	20,070
B. Contingencies			
1. Physical ^a	268	736	1,004
2. Price ^b	497	1,566	2,064
Subtotal (B)	765	2,302	3,067
C. Interest Charges	1,085	0	1,085
D. Duties and Taxes^c	0	1,636	1,636
Total	7,204	18,655	25,858
Percent Share	27.9	72.1	

ADB = Asian Development Bank, DEC = Distance Education Center, HSS = higher secondary school, NCED = National Center for Education Development, PTTC = primary teacher training center, TMCC = training management and coordination committee, TMIS = teacher management information system.

^a Estimated at 5 percent base cost.

^b Estimated at 2.4 percent per annum on local and foreign costs.

^c All ADB-financed goods and services estimated at 10 percent plus an additional 1 percent duty on foreign costs.

Source: ADB estimates.

IMPLEMENTATION SCHEDULE

Activity	2002				2003				2004				2005				2006				2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Component 1: Building an Effective and Sustainable System for Teacher Education																								
1.1 Strengthen TMCC																								
a. Restructure TMCC and amend TOR																								
b. Collate and prepare training policy document																								
c. Review and adopt proposed organizational structure of NCED and PTTCs																								
d. Establish TMCC																								
e. Improve and upgrade TMIS																								
f. Design and establish program coordination process																								
g. Design M&E system																								
- Implement M&E																								
- Undertake evaluation studies																								
h. Establish accreditation and certification system																								
i. Periodic reviews																								
- Policy implementation																								
- Project implementation																								
1.2 Enhance capacity of NCED																								
a. Management support to NCED																								
b. Program planning and workshops including procurement and financing plans																								
c. Implementation training																								
d. Short-term in-country training																								
- Master trainers																								
- Design and development of training materials																								
e. Short-term international training in training methodology, training program development, and IT in teacher training																								
f. International MS/M.Ed. in teacher education, educational technology and training related areas																								
g. Short-term in-country training for management training trainers																								
h. Short-term international training for management personnel																								
i. International MS/M.Ed. in management training																								
j. Construct and furnish multipurpose center																								
k. Establish TRC																								

Activity	2002				2003				2004				2005				2006				2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1.3 Enhance capacity of Government PTTCs																								
a. Development fund for facilities improvement and management/monitoring (annual grants)																								
b. Trainers training: TOT and refresher training of trainers																								
c. TMIS (training zone level)																								
- TMIS training																								
- Data processing																								
d. Media laboratory																								
e. Master's degree (Teacher Education)																								
f. Management support																								
g. Transport																								
- 4-WD vehicle																								
- Motorcycles																								
1.4 Enhance capacity of DEC																								
a. Refurbish recording studio																								
- Maintenance support																								
b. Short-term international training																								
- Distance education teacher training																								
- Training in script writing																								
c. Pilot integrated packages 2-3																								
d. Training in distance education teacher training management																								
- In-country																								
- Study tour international																								
- Quality assurance mechanism																								
1.5 Support to private PTTCs, HSS, and university sectors																								
a. Trainers training (in-service): TOT and refresher																								
b. Trainers training (preservice): TOT and refresher training																								
c. Teacher training development fund: annual grants for training facilities improvements																								
- Management support																								
Component 2: Developing Effective Teacher Education Curriculum and Materials																								
2.1 Training curriculum																								
a. Adoption of a national training curriculum (in-service)																								

Activity	2002				2003				2004				2005				2006				2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
b. Finalization and adoption of a national training curriculum (pre-service)																								
c. Revision and adoption of headmaster training curriculum																								
d. Revision and adoption of headmaster training curriculum																								
e. Condensed training curriculum for 50+ year-old teachers and 150 hours training completers																								
2.2 Training materials development																								
a. Basic training package																								
- Print basic training curriculum, trainer's guide, TOT manual, and resource materials for trainers																								
- Pilot and produce materials preparation kit																								
- Print trainee resource materials																								
b. Integrated packages 2-3 for DEC																								
- Print packages 2-3 curriculum																								
- Develop and print self-instructional resource materials																								
- Develop and print handbook for monitoring contact sessions																								
- Print trainee resource materials																								
c. Package 4																								
- Print package 4 curriculum																								
- Develop and print TOT manual, trainer's guide and resource materials for trainees																								
- Print trainee resource materials																								
d. Preservice training package																								
- Print preservice training curriculum																								
- Develop and print TOT manual, trainer's guide, and resource materials for trainees																								
e. Management training package																								
f. Multigrade training package																								
Component 3: Providing Teacher and Management Training																								
3.1 Deliver in-service training																								
a. Deliver basic package (PTTC, HSS, and mobile teams)																								
b. Deliver integrated packages 2-3 (DEC)																								
c. Deliver package 4 (PTTC, HSS, Mobile centers, RCs and SEDUs)																								
d. Deliver special package (180 hours)																								
e. Deliver special package (50+ years)																								

Activity	2002				2003				2004				2005				2006				2007			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
f. Support preservice training at FOE, HSS, private PTTCs																								
g. Deliver management training																								
Component 4: Education Teachers To Better Serve the Needs of the Disadvantaged Groups and Girls																								
4.1 Increase number of teachers from ethnic minorities and disadvantaged group, particularly females.																								
4.2 Culture and gender sensitization																								
a. Design sensitization package and develop training materials																								
b. Deliver training for teachers from 12 districts																								
4.3 Girls education promotion program																								
a. Local database																								
b. Planning groups																								
c. Pilot tutorial programs																								
d. School support groups																								

DEC = Distance Education Center, FOE = Faculty of Education, HSS = higher secondary school, IT = information technology, M&E = monitoring and evaluation, NCED = National Center for Education Development, PTTC = primary teacher training center, RC = resource center, TMCC = training management and coordination committee, TMIS = training management information system, TOR = terms of reference, TOT = training of trainer, TRC = training resource center.

TENTATIVE PROCUREMENT PACKAGE

Item		Number of Packages						Estimated Unit Cost / Contract (\$)	Procurement Method
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
A. Civil Works									
For NCED	1 Annual grants for physical facilities improvement	3	2	2	1	1	1	10,000	LCB
For PTTC	2 Multipurpose center		1	1				275,000	LCB
	3 Annual grants for physical facilities development	18	9	9	5	5		10,000	LCB
For DEC	4 Refurbishment of studio	1	1					10,000	LCB
B. Equipment									
For NCED	1 Computers and printers for research and evaluation	1						8,000	LCB
	2 Computers and printer for accreditation and certification	1						8,000	LCB
	3 Office equipment	1	1	1	1	1		5,000	DP
	4 Audiovisual equipment for TRC			1				5,000	DP
	5 Information technology for TRC			1				50,000	LCB
	6 Library management and other software for TRC			1				5,000	DP
For PTTC	7 Desktop publishing facilities for TRC				1			7,500	LCB
	8 TMIS hardware/software	9						5,000	DP
	9 Motorbike	18						1,500	LCB
For DEC	10 4-WD vehicle	8						6,000	LCB
	11 Studio equipment	1	1					30,000	LCB
Equipment	12 Computers for improved research and manuscript writing capacity	1						5,000	DP
	13 Developing teacher training curriculum of packages 1 and 4	1	1	1	1	1		5,000	DP

Item		Number of Packages						Unit Cost / Contract (\$)	Procurement Method
		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6		
	14 Developing teacher training curriculum of packages II and III	1	1	1	1	1		2,000	DP
	15 Delivering teacher training packages 1 and 4	1	1	1	1	1		5,000	DP
	16 Delivering teacher training packages 2 and 3	1	1	1	1	1		2,000	DP
C. Furniture									
For NCED	1 Furnishing multipurpose center			1				32,000	LCB
For PTTC	2 Furnishing media laboratory			9				3,000	DP
D. Instructional Materials									
For NCED	1 Reference texts for TRC			1,000	500	500	500	15	DP
For PTTC	2 Materials for media laboratory	9						14,000	LCB
	3 Teacher materials kit	200						70	DP

DEC = Distance Education Center, DP = direct purchase (from local suppliers, distributors, together with the maintenance contract), LCB = local competitive bidding (for more than \$5,000), NCED = National Center for Education Development, PTTC = primary teacher training center, TRC = training resource center.

TERMS OF REFERENCE FOR CONSULTANTS

A. Capacity Building for Teacher Education (Component 1)

1. The Project will provide consultant inputs to strengthen the capacity of the teacher training institutions. The consultant inputs are summarized by expertise and duration, and presented in Table A8. The consultants' diagnostic and terms of reference are given here with the person-months in parentheses.

1. International Consultants

a. Chief Technical Adviser (36)

2. The Chief technical adviser (CTA) will provide management and technical support for institutional strengthening of the National Center for Education Development (NCED), and for efficient execution of project activities. The CTA will be a teacher training and management specialist with extensive professional experience in Asia, ideally Nepal or the region, and will work closely with the executive director and the deputy directors of NCED. The CTA's responsibilities will include the following:

- (i) Review international experience in delivering short-term and Master's training to improve teacher training system, and lessons learned from such experiences that are particularly relevant to the design of teacher training in Nepal.
- (ii) Oversee the organization and implementation of training courses for all stakeholders in the teacher training system (government and nongovernment).
- (iii) Conduct for NCED staff workshops in annual program planning and developing staff management plans.
- (iv) Analyze the staff development plan and develop a detailed training plan to cover all in-country and international training including Master's programs, and define the selection requirements for candidates for each type of training.
- (v) Identify institutions for appropriate placement of all international training assignments (short-term training and Master's courses); and monitor the planning, scheduling, and implementation of such training.
- (vi) Establish specific objectives for each study tour and international training relating to the knowledge and skills transfer anticipated; develop organizational procedures and guidelines for selecting participants, and procedures to ensure specific skills/knowledge transfer by organizing local seminars, workshops, and meetings.
- (vii) Design effective follow-up activities for all study tour and international training to include briefing sessions to all NCED staff and written reports that may be used in the revamped NCED newsletter.
- (viii) Provide technical support to senior Department of Education (DOE), NCED, and Distance Education Center (DEC) officials in determining the future policy on teacher training in Nepal.
- (ix) For optimum results, coordinate the tasks of other short-term international consultants and domestic consultants.
- (x) Periodically review progress made in project implementation, identify potential problems, and suggest remedial measures.
- (xi) Prepare technical reports on project activities and progress to share with all key stakeholders of the teacher training system in Nepal.
- (xii) Assist in reviewing project activities, including the midterm review.

- (xiii) Undertake other activities as requested by NCED and the Asian Development Bank (ADB).

b. Financial Management Adviser (3)

3. The financial management adviser will assist the executive director and the CTA to undertake these tasks:

- (i) Establish financial and accounting procedures for project implementation following the requirements of the Government and ADB, inclusive of project accounting, auditing and financial reporting, preparing withdrawal applications for loan funds, mechanisms related to the disbursement of project funds, management of project accounts, financial reporting to Government and ADB, liaison with the Government on its financial contribution to the project cost.
- (ii) Prepare detailed financial plan estimates for the initial years of the project.
- (iii) Prepare financial guidelines for project implementation at central and zonal levels.
- (iv) Design and implement training for NCED staff and those at the primary teacher training centers (PTTCs) in the project's financial and accounting procedures.
- (v) Design and issue contracts, quarterly progress reporting procedures, and communications with ADB on all aspects related to project financing.
- (vi) Adopt relevant software for financial management.

c. Monitoring and Evaluation Consultant (3)

4. The monitoring and evaluation consultant will work with the chief of the Research and Evaluation Section of NCED. The consultant will be responsible for the following:

- (i) Design a benefit monitoring and evaluation (BME) system, which includes input, process, and output/impact indicators along with a time line for data collection and processing.
- (ii) Ensure that conceptual and technological linkages between DOE's education management information system (EMIS) and BME system are fully operational and maintain maximum possible synergy.
- (iii) Improve and upgrade teacher management information system (TMIS) at NCED and PTTCs.
- (iv) Train NCED and PTTC staff in monitoring and evaluation.
- (v) Work with DOE and NCED staff to ensure developments in Nepal are fully in line with similar developments in other countries.
- (vi) Assist staff to gain the maximum benefits from the systems developed and that this is being presented to training management and coordination committee (TMCC) as advice for policy formulation.
- (vii) Ensure that training opportunities are being pursued fully to agreed upon career progression that will yield an enhanced national capacity that will be self-sustaining by Project end.
- (viii) Design training programs and train NCED and PTTC staff in assessing such programs.
- (ix) Select appropriate software for processing, monitoring, and evaluating data.
- (x) Train NCED and PTTC staff in using a data analysis package.

- (xi) Provide policy advice on future trends in monitoring and evaluating teacher training that will lead to greater assessment of the overall benefits of the Project and further improvements to the teacher training system.

d. Accreditation and Certification Consultant (2)

5. The international accreditation and certification consultant will work with the chief of the examination system, NCED, and TMCC to undertake these activities:

- (i) Develop a national system for accrediting new training institutions and training programs, particularly recurrent training programs, by creating an understanding of systems used in other countries and the lessons learned in their implementation.
- (ii) Identify policies and procedures for developing a nationwide accreditation scheme.
- (iii) Design teacher certificate standards and appropriate tools.
- (iv) Assist NCED to formulate rollout plans for implementing an accreditation and certificate system.
- (v) Train NCED and PTTC staff in implementing the accreditation and certification system.

e. Teacher Training Specialist (3)

6. The teacher training specialist (TTS) will undertake these activities:

- (i) Review and refine a basic training of trainers (TOT) manual.
- (ii) Train master trainers at NCED.
- (iii) Prepare TOT manual and trainers' guide for package 4 and preservice primary teacher training.
- (iv) Introduce innovative methods and materials in TOT.
- (v) Participate in and guide master trainers in conducting TOT.

f. Management Training Specialist (3)

7. The management training specialist will work with the chief of the Management Training Section of NCED and do the following:

- (i) Review the present management courses offered at NCED and those available elsewhere in Kathmandu, recommend changes, and revise the curricula following a rapid needs assessment.
- (ii) Develop TOT and trainer's guide for the management training programs.
- (iii) Organize in-country training for the management training staff of NCED.
- (iv) Participate in and guide the management training staff in conducting management training programs.

g. Distance Education Technology Consultant (2)

8. The distance education (DE) technology consultant will assist and advise DEC to ensure an appropriate, cost-effective, low-maintenance design to equip a refurbished recording studio at DEC. The consultant should be a suitably experienced technician/engineer with extensive experience, ideally in South Asia, who can also provide future support and advice to DEC

including a parent institution's hosting of a reciprocal visit for the relevant DEC technician. The consultant will undertake these tasks:

- (i) Brief DEC staff on developments in digital recording studios and their application to distance education, including their functionality and versatility with the use of compressed files for data warehousing; application to radio broadcasting; use of MP3 files and access to materials via the Internet.
- (ii) Advise DEC on options available through low-cost PC-based technology for high-quality education program transmission based on content evaluation of the proposed revision to packages 2 and 3 only.
- (iii) Design a multitrack recording facility including complete component specification, training requirements, and maintenance procedures including D/A conversion as required by Radio Nepal.
- (iv) Advise DEC and the procurement consultant on the most cost-effective means of sourcing and supporting the new facility, including servicing or replacing items as required, and assessment of options to rent local radio stations or recording studios as a cost-effective means of ensuring launch of revised packages.
- (v) Train staff on studio maintenance.

h. Distance Education Materials Writing Consultant (3)

9. A consultant with extensive experience in writing teacher training materials for radio transmission in developing countries will work with the domestic materials writers at DEC, and with the curriculum reform staff at NCED to develop new materials for packages 2 and 3. The specialist will undertake these tasks:

- (i) Train all materials writers involved in integrated packages 2-3 in the opportunities available through the new digital recording studio, and demonstrate means of sourcing sound clips and other materials through the Internet.
- (ii) Orient staff in developments in radio broadcast teacher training materials, and assist in selecting methods that are of greatest relevance to Nepal.
- (iii) Design and write two units of both packages 2 and 3 with the DEC and NCED team as a pilot for the new packages.
- (iv) Design quality assurance checks in producing new materials for packages 2-3.
- (v) Design a monitoring procedure to establish the use and impact of DEC training materials.

2. Domestic Consultants

a. Teacher Education Specialist (40)

10. The teacher education specialist (TES) will work as a cofacilitator with the CTA to ensure that NCED staff internalize the inputs from the CTA and put them into practice. TES will also provide management and technical support to the PTTCs. The responsibilities of the TES will be as follows:

- (i) Facilitate CTA interaction with MOES and other government agencies and stakeholders.

- (ii) Review trends, experiences, and lessons learned from teacher education programs in Nepal, and share those with the CTA and NCED management in identifying potential interventions and innovations for systemic improvement of teacher training in Nepal.
- (iii) Assist in planning workshops and implementing training programs.
- (iv) Identify local institutions and resources for in-country training programs.
- (v) Assist NCED management in identifying and selecting appropriate staff for in-country training and training materials development activities.
- (vi) Provide management and technical support to PTTCs in organizing staff development activities.
- (vii) Assist in conducting periodic progress reviews, including midterm reviews, and in preparing reports.
- (viii) Prepare periodic technical reports on progress and problems faced by PTTCs and other private training agencies.
- (ix) Undertake other activities as requested by CTA and NCED management.

b. Training Policy Expert (3)

11. The training policy expert (TPE) will work closely with TMCC, the executive director, and the CTA. The TPE's responsibility will be as follows:

- (i) Conduct a thorough in-house review of policy documents at NCED and TMCC.
- (ii) Analyze the policy statements to identify gaps, imbalances, and inconsistencies.
- (iii) Prepare a concise training policy paper for presentation in the workshop and serve as a resource person to the workshop.
- (iv) Refine and finalize a training policy document on the basis of comments and suggestions received during the workshop and from other relevant sources.
- (v) Draw implications of training policy statements for institutional arrangements, implementation strategies, and coordination mechanisms.

c. Monitoring and Evaluation Specialist (18)

12. The monitoring and evaluation specialist will work with the international monitoring and evaluation consultant and staff of the Research and Evaluation Section of NCED. The specialist will perform these tasks:

- (i) Participate in and contribute to the design of a BME system at NCED.
- (ii) Facilitate dialogue and interaction between NCED staff and EMIS personnel at DOE.
- (iii) Act as cofacilitator in training NCED staff in the BME system.
- (iv) Provide hands-on experience to NCED staff in implementing the BME system.
- (v) Provide technical support to PTTC in upgrading and improving TMIS at training zone level.
- (vi) Assist NCED staff in publishing a monitoring and evaluation newsletter periodically.

d. Procurement Consultant (6)

13. The procurement consultant will work with the executive director, and finance officer to perform these tasks:

- (i) Prepare a detailed procurement plan in line with the project requirements.
- (ii) Develop transparent procedures that conform to both Government and ADB guidelines for all procurement under the Project.
- (iii) Design and deliver training courses in procedures for all staff under the Project.
- (iv) Design a record-keeping system for project procurements.
- (v) Design quality and management control checks to ensure complete transparency of operation including regular auditing of all records.
- (vi) Supervise all procurement under the Project

e. Master Trainer's Facilitator (10)

14. The master trainer's facilitator will work with the management training staff and teacher training specialist and management training specialist international consultants. The expert will undertake these tasks:

- (i) Participate in and contribute to the preparation of the TOT manual and trainer's guide for teacher and management training programs.
- (ii) Act as cofacilitator in the master trainers training program and in-country training for the management training staff.
- (iii) Provide hands-on experience in master training in conducting a few batches of TOT.
- (iv) Identify and prepare a set of effective training materials for the TOT programs.

f. Training Experts (16 x 9 person-months each=144)

15. The training experts will have considerable experience in participatory training practices, and will play a facilitating role in institutional transformation of the PTTCs. The training experts will perform these duties:

- (i) Promote team effort in annual program planning of the PTTCs.
- (ii) Organize mini workshops for facilitating adequate preparation for teacher training programs.
- (iii) Act as cofacilitator and guide PTTC trainers in conducting training programs.
- (iv) Organize exhibits and cultural programs in the PTTC.
- (v) Promote linkage of training programs to classroom teaching practices.

g. Information Technology Experts (2 x 9 person-months each= 18)

16. The information technology (IT) experts will help establish the media centers at PTTCs. The experts will have these tasks:

- (i) Assist in installing IT and other facilities in the media center at PTTC.
- (ii) Train PTTC staff in the use of IT facilities for training, education, and communication.

h. Distance Education Materials Writing Expert (12)

17. The specialist will undertake these tasks:

- (i) Participate in and serve as cofacilitator in training scriptwriters.
- (ii) Provide hands-on experience to scriptwriters.

- (iii) Assist distance education (DE) writers in developing self-learning resource materials for trainees.
- (iv) Assist in piloting self-learning DE materials.
- (v) Improve DE materials on the basis of feedback from pilot testing.

i. Distance Education Management Expert (12)

18. The specialist will perform these duties:

- (i) Assist DEC managers in designing the management system of the DEC in-service training package.
- (ii) Train DEC staff in managing DEC training.
- (iii) Prepare a handbook for resource persons responsible for organizing and conducting contact sessions for teacher trainees.
- (iv) Assist in designing and developing a monitoring procedure to establish the use and impact of DE training materials.
- (v) Assist in improving the management and use of DEC training.

B. Training Curriculum and Materials Development (Component 2)

1. International Consultant—Multigrade Teaching Specialist (3)

19. The multigrade teaching (MGT) specialist will design, and assist in implementing appropriate model of MGT based on his expertise and experience in a similar situation. The specialist will perform these tasks:

- (i) Assess the extent and practice of multigrade and multiclass teaching in Nepal.
- (ii) Design an appropriate model of multigrade and multiclass teaching along with teacher preparation strategy and teaching learning materials.
- (iii) Validate the model and materials in a workshop of key stakeholders.
- (iv) Design and conduct a pilot test of the model and materials.
- (v) Refine the materials to implement in selected districts.
- (vi) Recommend strategies for wide implementation and improvement of multigrade and multiclass teaching in primary schools in Nepal.

2. Domestic Consultants

a. Teacher Training Curriculum Development Specialist (3)

20. The teacher training curriculum development (TTCD) specialist will prepare a condensed training package for 50+ years teachers, and for those who have completed 150-hours training. The specialist will undertake these activities:

- (i) Prepare a condensed curriculum and trainer's guide for the Basic Package for 50+ years on the basis of a rapid training needs assessment.
- (ii) Prepare a condensed basic package for completers of the 150-hour training by selecting training contents that were not covered in that training.
- (iii) Validate the condensed packages in a workshop of major stakeholders.
- (iv) Assist NCED staff in presenting the condensed packages to the TMCC for approval.

b. Training Materials Development Specialists (one each for package 4 and for preservice training: 9x2; 2 at 10 person-months each)

21. The training materials development specialists will work with the international TTS and master trainers. The specialists will have these responsibilities:

- (i) Assist TTS in designing and developing trainer's guides for package 4 and preservice training.
- (ii) Guide a group of specialists in preparing resource materials for trainees (package 4 and preservice).
- (iii) Edit the resource materials.
- (iv) Assist NCED staff in pretesting the resource materials.
- (v) Improve and finalize the resource materials.

c. Management Training Program Development Specialist (6)

22. The management training program development (MTPD) specialist will work with the international management training specialist and management training staff of NCED. The specialist will undertake these tasks:

- (i) Participate in, and contribute to the revision and refinement of management training programs for HM, resource person (RP), district education officer (DEO), and middle-level managers.
- (ii) Assist in designing and developing the trainer's guide for management training programs.
- (iii) Act as cofacilitator in in-country training of NCED management training staff.
- (iv) Assist management training staff in conducting revised management training.

d. Management Training Materials Development Specialists (one each for HM, RP, DEO and middle management training: 4x4; 16 person-months)

23. The materials development specialists will work with the program development specialist, international MTS, and NCED management training staff.

- (i) Design prototype training materials for different management training in line with their respective trainer's guides.
- (ii) Guide groups of specialists in preparing resource materials for trainees in different management training programs.
- (iii) Edit the resource materials.
- (iv) Assist the NCED management training staff in pretesting the resource materials.
- (v) Improve and finalize the resource materials.

e. Multigrade Teaching Specialist (6)

24. The specialist will perform these tasks:

- (i) Assist in conducting the rapid assessment of MGT in Nepal.
- (ii) Contribute to the design and development of appropriate model and materials for MGT.
- (iii) Act as cofacilitator of the workshop on MGT.

- (iv) Guide NCED/DOE staff in pretesting MGT material.
- (v) Train PTTC trainers in implementing MGT training.

C. Basic Education for Disadvantaged Groups and Girls (Component 3)

25. The culture and gender sensitization specialist (domestic, 5) will perform these tasks:

- (i) Design culture and gender sensitization programs for teachers, district officials, and educational administration.
- (ii) Develop training materials for sensitization programs.
- (iii) Pilot the sensitization training materials.
- (iv) Refine and improve the training package.
- (v) Conduct in-country training for NCED, DOE, and trainers from key training institutions.

Table A8: Summary of Consultant Inputs by Expertise and Duration

Expertise	Duration (person-months)	
	International	Domestic
Chief Technical Adviser (Teacher Training and Management Specialist)	36	40
Financial Management	3	
Monitoring and Evaluation	3	18
Accreditation and Certification	2	
Teacher Training	3	144 (16 person-months x9)
Management Training	3	16 (4x4)
Distance Education Technology	2	
Distance Education Materials Writing	3	12
Distance Education Management		12
Multigrade Teaching	3	6
Training Curriculum Development		3
Training Materials Development		10 (5 person-months x2)
Management Training Program		6
Training Policy		3
Procurement		6
Facilitation of Master Trainers		10
Information Technology		18 (2 person-months x9)
Culture and Gender Sensitization		5
Total	58	309

SHORTLIST OF VERIFIABLE INDICATORS FOR MONITORING AND EVALUATION

Indicator	Measurement	Expected Value		
		Baseline	Mid-Project	End-Project
		2000	2003	2005/06
A. General Key Indicators for the Basic Education Subsector				
1. Net enrollment rate	Proportion of children of PS target age cohort enrolled in PS	71	74	77
2. Gross enrollment rate	Proportion of children enrolled in PS to the PS target age cohort	124	117	114
3. Dropout rate	Proportion of PS enrollees who fail to return for the next year	13.0 percent	12.8 percent	12.5 percent
4. Repetition rate	Proportion of PS enrollees who fail to move on to the next higher grade	24.5 percent	23.9 percent	23.0 percent
5. Teachers with package I pre-service training	Number of teachers who have completed Package I	17,332		100 percent
6. Student-teacher Ratio	Number of PS students per PS teacher	39.0	39.0	39.0
B. Specific Key Indicators for Teacher Education				
1. Relevant NCED, PTTC, and DEC staff obtaining training	Number of relevant NCED, PTTC and DEC staff completing staff development training	0		
2. Female teachers	Proportion of female teachers	22.5 percent	23 percent	24 percent

Indicator	Measurement	Expected Value		
		Baseline	Mid-Project	End-Project
		2000	2003	2005/06
3. Untrained teachers	Number of PS teachers with no training	33 percent		0
4. Teachers trained in package 1	Number of PS teachers completing package 1	17,332	37,407	All
5. Upgrading 180 hours training	Number of teachers with 180 hours' training	9,693	8646	9693
6. Teachers trained in packages 2 and 3	Number of PS teachers completing packages 2 and 3	13,638	25,956	44,030
7. Teachers trained in Package 4	Number of PS teachers completing package 4	156	5,757	34,432
8. Fellowships awarded to women/members of disadvantaged groups	Number of fellowships awarded to women and members of disadvantaged groups	0	850	2,500
9. Number of students benefiting from preservice training	Number of tuition waivers awarded to women/members of disadvantaged groups	0	6,500	12,500
10. Training sessions at NCED	Number of training sessions conducted by NCED	5 cycles	6 cycles	7 cycles
11. Training sessions at PTTC	Number of training sessions conducted by PTTC	3 cycles	3 cycles	3 cycles
12. Training sessions at FOE	Number of training sessions conducted by FOE	0	1 cycle	1 cycle
13. Training sessions at by HSSs	Number of training sessions conducted by HSSs	0	1 cycle	1 cycle
14. Preservice training school accreditation	Number of schools accredited	0	65	65
15. Workshops held by NCED	Number of workshops held by NCED	4	5	6

DEC = distance education center, FOE = faculty of education, HSS = higher secondary school, NCED = National Center for Education, PTTC = primary teacher training center.

SOCIAL ASSESSMENT

A. Introduction

1. Nepal is a predominantly agricultural economy with a small industry sector and an expanding service and tourism sector. Agriculture contributes 41 percent to the gross domestic product (GDP) and employs 81 percent of the labor force. The industry sector comprises small firms producing consumer goods. Industry, mining, power, and construction together employ 5 percent of the labor force. Trade, tourism, transport, communication, finance, and social services provide work to the remaining 14 percent of the labor force. Most people are self-employed, with females (92 percent) being more likely to be so than men (76 percent). The major exports are carpets and garments. India is the largest trading partner, with exports comprising mainly primary products. During the Eighth Plan Period, 1992-1997, GDP grew at the rate of 4.9 percent annually. Per capita income, currently estimated at \$220, grew 2.9 percent per year during the same period. The sectoral distribution of Nepal's GDP shows a gradual shift from primary production to secondary and tertiary production, and indicates a future need for more educated people.

2. Nepal ranks among the world's poorest countries. Forty-two percent of the Nepali population continues to live below the poverty line. The United Nations Development Programme's broader measure of development, the human development index, ranks Nepal 144th out of 174 countries. Large disparities persist across regions and socioeconomic groups. The 1991 census counted 29 caste groups and 26 ethnic groups with over 50 language groups and subgroups. The majority of the population (86 percent) lives in rural areas. The literacy rate is 38 percent. Among the poor, only 20 percent are literate compared with 60 percent among the higher income groups. Rural residents are twice more likely to be illiterate than those living in the urban areas. Gender inequality is also evident. The literacy rate is 52 percent for men and 24 percent for women. This disparity is magnified among the poor. About one third of the men are literate, while one in 10 women is. Malnutrition is prevalent: 64 percent of children are stunted. The infant mortality rate, at 77.2 per 1,000 live births, is high compared with that in countries at similar levels of development. Slow economic growth, insufficient social and economic infrastructure, a relatively high population growth rate, and deep-rooted cultural practices contribute to poverty in Nepal. Poverty excludes people from benefiting and participating in society and development. Thus, the major challenges facing Nepal are to break out of poverty and raise the level of human development for all groups in society, including the disadvantaged groups and females.

B. Basic Education in Nepal

3. More than 88 percent of the households in Nepal live within 30 minutes of a primary school. However, education levels are low and demonstrate disparities across gender, income groups, and regions. The primary gross enrollment ratio in 1997 was 122 while the primary net enrollment ratio was only 70. More boys than girls were enrolled in primary school: two girls for every three boys were in school. Education indicators are worse in the mountain and tarai regions. Less than 4 of every 10 students were girls, and the gross enrollment ratios were lower than in the rest of the country. Official statistics indicate that children in more than 1 of 10 households in the hill regions take between half an hour to one hour to reach the nearest primary school.

4. Low internal efficiency compounds the problems of equity and access. Grade repetition and dropout rates are high. In 1996, 4 in 10 students repeated grade 1, 23 percent dropped out, and only 35 percent went on to grade 2. The proportion of girls and boys promoted to grade 2 was about the same at 35 and 36 percent, respectively. In grade 5, one in five students repeated, and 15 percent dropped out. In grade 1, girls were more likely to drop out while in grades 3 and 4, boys were more likely to drop out than girls. In 1999, the survival rate to grade 5 was a low 50 percent.

5. Learning outcomes are poor. In a national study of grade 3 students, achievement levels in the three core subjects—Nepali, mathematics, and social studies—were generally low. Student achievement levels at the primary level are unsatisfactory. In 1997, 81 percent of those who sat for the primary level examination passed, representing 67.5 percent of the students enrolled in grade 5. The learning outcomes of girls were poorer and may be attributed to a combination of the following factors: unequal access to quality education, inhospitable learning environments, inadequately trained and poorly motivated teachers, and lack of quality learning materials.

6. Improving the quality of teaching is crucial to improving the quality of education in Nepal. A large proportion of the teaching staff is untrained. Of the approximately 90,000 primary school teachers, 31,500 have no training of any kind, and only 156 have undergone the four training packages considered necessary for preservice training. The problem is compounded by lack of a satisfactory system of regular preservice and in-service training.

C. The Project

7. The Project is designed to improve the quality of basic education by addressing deficiencies in the teacher training system comprising preservice, in-service, and recurrent training. Teacher training institutions will be strengthened; key administrative personnel, trainers, and teachers will receive training; and curriculum and teaching learning materials will be developed. The Project also addresses teaching-related inequities in basic education across gender and population groups. General issues of enhanced access to and improved quality of education for girls and other disadvantaged groups are being addressed through the multisource-funded Basic Primary Education Project II (BPEP II). However, discriminatory treatment and lack of sensitivity on the part of teachers can discourage children from going to school.

8. Through one component—educating teachers to better serve the needs of the disadvantaged groups and girls—the Project will promote the goal of improved access for girls and disadvantaged groups by:

- (i) supporting the training of prospective teachers who are female, giving preference to candidates from 12 districts. The 12 districts were selected because the majority of their total population (65 percent) belongs to disadvantaged groups. These districts also account for 20 percent of the total disadvantaged population in the country;
- (ii) recruiting and training an additional 2,500 teachers who are female, preferably those belonging to disadvantaged groups, for vacancies caused by natural attrition. Eligible female candidates will be given scholarships, with priority to candidates from disadvantaged groups; and
- (iii) giving sensitization training for teachers and administrators, focusing on the extent and nature of discrimination, ways of minimizing discrimination, and enhancing self-esteem among target groups. This sensitization element is integrated within the training curriculum to ensure that it is an integral part of the training of trainers, and of teachers and administrators.

9. This component is intended to increase the representation of females and disadvantaged groups in the teaching force, and thereby encourage their enrollment. Progress in meeting this objective hinges on several factors external to the Project: (i) the community's attitude toward educating girls; (ii) the availability of qualified candidates who will apply for the fellowships; (iii) the

number of new female teachers recruited for vacancies due to attrition of currently employed teachers; and (iv) the Government's commitment to increasing the proportion of females.

D. Social Assessment of the Target Groups

1. The Client

10. During the Project's preparation phase, a social assessment survey¹ was commissioned. In this assessment of disadvantaged groups (DG), the term *disadvantaged* was defined as "those oppressed, deprived, and downtrodden people making their living on traditional occupation; deprived and oppressed because of social-economic reasons, and listed in Nepal's gazette as such."² For the survey, DGs were identified using the following criteria: economic deprivation and social discrimination, educational backwardness, inequitable access to economic resources, incentives, and facilities; remoteness; and non-Nepali mother tongue. The sample has 16 disadvantaged groups in 10 VDCs and two municipalities in five districts. The survey made use of two main field methods: school observation and group discussion. Parents of enrolled and out-of-school children, enrolled students and out-of-school children of school age, non-participating females, and village change agents participated in the group discussions. Officials at the district and VDC level were interviewed. PRA tools, such as ranking of needs, were also employed.

11. The DGs in the sample include untouchables, indigenous ethnic groups, and minority religious groups. The term ethnic minority (*janajati* in Nepali) is used to describe the 60 indigenous ethnic and religious groups categorized by the Government, and have the following features: a distinct collective identity, language, religion, tradition, culture and egalitarian social structure, and written or oral history. The amorphous definitions of DGs and ethnic minorities reflect the deep-rooted sociocultural nature of discrimination. A list of disadvantaged groups prepared by the Center for Educational Research, Innovation and Development (CERID) is in Table A10.1. In the 12 districts that will receive preference in the Project's component 4, two thirds of the aggregate population and 7 of every 10 children aged 6–10 years belong to ethnic minority and disadvantaged groups (EMDG, Table A10.2). A high percentage of these children are not availing themselves of educational opportunities: 4 out of 10 are not enrolled. The representation of ethnic minorities at the policy formulation and decision-making level is extremely limited. For example, the current parliament has no members from the "Dalit" group.

12. In Nepal, remote areas account for 42 percent of the country's total land surface and 13 percent of the total population. A remote area is defined as a region with difficult terrain, difficult accessibility, and poor communication facilities. The Government has identified 22 of 75 districts as "remote area districts," of which 13 are acutely remote. Only eight of these remote districts are accessible by road. The social service infrastructure is generally poor, and service providers are not normally available. In the remote regions, primary education leaves much to be desired. A study conducted by METCON in 1995 found a quarter of primary schools operated with incomplete grades. Fifty-four percent of the pupils did not have a complete set of textbooks. The teacher-to-school ratio was 3:1. Only 50 percent of teachers could speak and understand the local languages. Nearly 26 percent of the teachers were found to be absent daily from the schools.

13. The 16 selected groups suffer varying intensities of disadvantage for varying reasons. A listing of these selected groups, with their disadvantage is in Table A10.3.

¹ Enrichment of Basic Education for Ethnic Minorities and Girls. August 2000.

² Manav Maryada, HMG Ministry of Local Development, National Committee for the Development of Oppressed and Downtrodden, vol. 1. no.1, p. 2.

14. All groups in the sample live in extreme poverty and have extremely low social status. Due to economic hardship, many families keep their children out of school. Landlessness leads families to live in temporary settlements, making it difficult for children to pursue or complete their studies. Low social status causes extremely low self-esteem and social alienation. “Untouchability,” in the case of the Kami, Damai, and Sarki groups in all districts have alienated them from the rest of the community. In the case of the Badi community of Nepalgunj Banke, the social stigma attached to prostitution hampers school participation.

15. Regional features, such as climatic conditions, require families and children to move to different locations regularly to cope with seasonal changes and search for new sources of income. This is the situation in which the Sherpa of Tatopani, Sindhupalchok district and the Sarki of Dadaphaya in the sample live. Geographic remoteness of facilities also increases the cost of education and leads to lower enrollment of children, especially females.

Table A10.1: List of Disadvantaged Groups In Nepal

Disadvantaged Groups	Disadvantaged Indigenous Ethnic Groups	
Kami	Kumal	Bankaria
Damai	Kisan	Baramo
Sarki	Kusbadia	Barhagaunle
Chamar	Gangai	Bote
Badi	Gurung	Byansi
Dhobi	Chimtan	Bhuje/Gharti
Kasai	Chepeng	Bhote
Chyame	Chhantyal	Magar
Hajam	Chhairotan	Manange
Kusule	Jirel	MajhiMarphali
Pode	Jhangad	Mugali
Bantar	Bhintan	Meche
Dom	Dolpo	Rai
Dusadh	Tanghe	Raute
Musahar	Taipuria	Rajbanshi (Koch)
Badhi	Tamang	Raji
Baraj	Tokegola	Larke
Koiri	Thakali	Limbu
Kewat	Thami	Lepcha
Maliah	Tharu	Lhopa
Thakur	Thudum	Lhomi
	Danuwar	Sherpa
	Darat	Sattar/Santhali
	Dura	Siyar/Sunuwar
	Dhanul	Surel
	Dhimai	Syangtan
	Newar	Hayu
	Pahari	Holung
	Phri	Hyalmo

2. Client Needs

16. From a menu of likely needs, seven of the EMDGs—Musahar, Muslim, Tamang, Darai, Magar, Gurung, and Sarki—were asked to rank their major needs in the context of their culture and school. The respondents included both participating and nonparticipating parents and change agents in the community. They ranked their needs as followed:

- (i) Special quota, stipend
- (ii) Alternate income source
- (iii) Adequate attention by the teacher
- (iv) Same ethnic/caste teacher
- (v) School for disadvantaged groups
- (vi) Better student ratio than at present
- (vii) Compatible school calendar or scheduling
- (viii) Shorter distances to schools
- (ix) Female teacher in school

17. This ranking of needs points to the primacy of the economic constraints parents face when deciding to send their children to school. In this connection, parents mentioned the need for incentives, e.g., stipends and other subsidies, to lower the cost of sending children to school. Despite the free and compulsory primary education in Nepal, families still incur costs for stationery, uniforms, books, exam fees, etc. For poorer families, these school-related expenditures are a deterrent to sending children to school. The focus of the next set of needs is the teacher. Parents allude to a need for better teacher quality that is thought to be demonstrated by adequate attention to children in schools, regular monitoring of children's academic progress and behavior, and the teacher belonging to the same ethnic group or caste as the children.

3. Client Demands

18. Four of every ten 6 to 10-year-olds are not in school in the 12 selected districts that will receive preference in the Project's component 4. In the sample districts, primary school participation is increasing, yet almost two out of five children are not enrolled. Parents, children, and other community members look at education as a means of getting employment, and a brighter economic future. It creates awareness among the learners of the many developments beyond the geographic boundaries of their communities, and opens the door to more useful information.

19. Many eligible children are unable to attend school for reasons related to income, the teacher, and the school. Sample families indicated that their incomes are inadequate to meet the regular cost of schooling, including stationery, clothing, and books. Children's labor at home or in the labor market supplements family income, and their economic contribution cannot be forgone.

20. Teacher-related factors for nonparticipation have several dimensions. Six out of 10 teachers are untrained in the sampled districts. In conversations with parents, they noted this particular lack of trained teachers. They observed that commitment to teaching the children of the community is lacking, and they surmised this to be arising from the "temporary" status of the teacher's position. Parents and community change agents emphasized the need to make primary school teachers permanent so as to expect greater commitment and better output, and to give stability to schools. Frequent transfers of teachers by the district education officers were also noted as a factor hampering children's learning. Interviewees mentioned that many teachers lack cultural sensitivity. Discriminatory behavior in schools negatively affects disadvantaged children's self-esteem and classroom learning. Parents and children expressed an urgent need to deploy a teacher from the same or similar ethnic background to help children learn better.

21. Female teachers are sometimes heavily concentrated in urban locations. In Sunsari and Tanahun, female teachers are mostly found in urban area schools. In Sindhupalchok, there are no female teachers despite the large number of female students enrolled. In Simikot, Dadaphaya, Thehe, Chhitaha, Madhuban, Pipaldada, and Tatopani, the interviewed members of the minority

groups—Bhote, Sarki and Damai-Kami, Musahar, and Oraon—emphasized the need for a female or local teacher in schools with concentration of students from EMDGs.

22. The national mean teacher-student ratio is 39:1. The government standards are 35:1 in the mountain region, 45:1 in the hills, and 55:1 in the tarai. However, sample schools visited during the survey paint a different picture. Classrooms are overcrowded. Student-teacher ratios in the visited schools were observed as follows: 176:1 in Chimdi, Sunsari; 125:1 in Chhitaha, Sunsari; and 111:2 in Sindhupalchok's Bhumiraj Primary School.

23. The primary school system of Nepal urgently needs attractive and clean schools with reasonable teacher-school and teacher-student ratios. A large percentage of primary schools in the disadvantaged areas do not have enough classrooms, lack toilet facilities, have no drinking water, and have neither a playground nor sports-related facilities/equipment.

4. Absorptive Capacity

24. Table A10.3 shows that in the selected communities where EMDGs are identified to be the main beneficiaries, their children comprise 70 percent of the primary school age population. Four out of 10 children are not enrolled, and are likely to come mostly from EMDGs. In the social assessment survey, parents cited the need for teachers, preferably female, who are sensitive to the language and culture of the communities. Teachers with pedagogical training who can not only impart knowledge but also do so effectively are needed. The sampled overcrowded classrooms further underscore the need for more trained teachers who can manage and teach many students at same time.

25. The Project will sponsor 2,500 female students, preferably from disadvantaged groups. Focusing on the 12 disadvantaged groups, in 1998, 8,959 girls were enrolled in grade 10. Assuming that 40 percent receive their school leaving certificates, there will be about 3,600 new eligible females for the fellowships annually. If 1 in 10 receives the fellowship every year, the Project can have about 360 students from the 12 disadvantaged communities. Other eligible female candidates, especially from other disadvantaged communities, can also apply, which makes it likely that all 2,500 fellowships will be awarded to eligible candidates within the project implementation period.

5. Gender Issues

26. Gender bias is deeply rooted in Nepali society, including in the sample districts. Children's economic contribution to families, specifically girls', keeps them from being enrolled in school. Families favor enrolling boys, and not girls. Among the interviewed families, girls spend 2-3 hours more on household activities than boys do, time that could have been spent on education-related activities. In all of Nepal, only three girls are enrolled for every four enrolled boys. In some districts, this ratio is even lower.

27. Tradition binds women to their homes; women are less likely than men to be working outside their houses. Among primary education teachers, this is exemplified by the minority representation of women at 22.5 percent. In the tarai, mountain, and hill regions in 1997, less than one in five teachers was a female. To increase female representation in primary education, especially members of disadvantaged groups, the Project will support preservice training fellowships for females, especially from the disadvantaged groups. The Government's commitment to increasing the proportion of female teachers will play a crucial role in achieving this objective.

Table A10.2: Educational profile of Ethnic Minority and Disadvantaged Groups in 12 Project Districts

Project Districts/ Regions ^a	Total Population	Ethnic Minority Out of Total Population		No. of Primary Schools	6-10 yrs Population in the District			EM/Dalit Groups in the District ^b	Nearest PTTC Zone	Sup. Grp Needed	Total VDC / Municipality
		Number	Percent		District Total	EM/Dalit out of Total	Unenrolled out of Total				
1. Banke WT ^a	285,604	226,471	79.3	206	47,523	37,367	23,286	Tharu, Muslim, Yadav, Magar, Kamaiya, Badi	Surkhet	32	46/1
2. Bhojpur EH	198,784	135,472	68.2	323	29,202	22,352	3,796	Kirat-Rai, KDS, Tamang	Bhojpur	51	63
3. Dang WT	354,413	126,818	35.8	337	60,020	20,924	18,607	Tharu, KDS, Magar	Rupandehi	53	38/2
4. Doti FWH	167,168	53,018	31.7	304	25,217	8,747	7,313	KDS, Magar, Raji	Dipayal	49	52/1
5. Humla MWM	34,383	10,845	31.5	92	4,506	789	1,522	Bhote, Kami, Sarki, Damai	Surkhet	15	27
6. Mahottari CT	440,146	386,551	87.8	231	68,137	63,780	35,431	Yadav, Muslim, Masahar, Dhanuk	Dhanusha	37	76/1
7. Myagdi WH	100,552	73,054	72.7	199	13,724	12,053	686	Thakali, KDS, Magar	Tanahu	32	40
8. Sindupalchok CM	261,025	170,789	65.4	488	37,319	28,180	4,478	Tamang, Sherpa, KDS, Danuwar, Majhi	Kavre	75	79
9. Sunsari ET	463,681	337,293	72.7	426	74,215	55,653	8,115	Tharu, Muslim, Yadav, Musahar, Dhanuk	Sunsari	68	49/3
10. Surkhet MWH	225,768	120,800	53.5	395	38,043	19,569	26,717	Kami, Damari Tharu, Magar, Sarki, Thami	Surkhet	63	50/1
11. Tanahu WH	268,073	191,080	71.3	526	41,713	31,528	834	Gurung, Magar, Kumal, Darai, KDS	Tanahu	83	44/1
12. Taplejung EM	120,053	90,447	75.3	263	16,953	14,923	1,526	Limbu, KDS, Rai Sherpa	Sunsari	42	48

^a Ethnic Minority and disadvantaged groups surveyed for social assessment during the project formulation phase.

C = central, E = eastern, F = far, H = hill, M = mountain/mid, T = tarai, W = western.

^b KDS = Kami, Damia, Sarki.

Source: DOF/CBS.

Table A10.3: Sample Groups and Their Disadvantages

Ethnic Minority and Disadvantaged Group	District	Disadvantages
1. Sherpa	Sindhupalchok	1. Remoteness 2. Harsh climatic condition
2. Tamang	Sindhupalchok	1. Economic hardship such as insufficient grain production 2. Lack of sources of cash income
3. Bhote	Humla	1. Remoteness 2. Lack of steady sources of cash income
4. Kamaiya Tharu	Banke	1. Economic - landlessness 2. Social - Kamaiya status
5. Magar	Tanahun	1. Insufficient grain production 2. Lack of sources of cash income
6. Darai	Tanahun	1. Insufficient grain production 2. Lack of sources of cash income
7. Gurung	Tanahun	1. Lack of sources of cash income
8. Muslim	Sunsari	1. Lack of sources of cash income 2. Transfer from madrasa to HMG school not yet in practice
9. Teli	Sunsari	1. Lack of sources of cash income
10. Tharu	Sunsari	1. Lack of sources of cash income
11. Jhangar	Sunsari	1. Landlessness 2. Lack of permanent settlement 3. Lack of cash income
12. Musahar	Sunsari	1. Landlessness 2. Lack of permanent settlement 3. Lack of steady cash income
13. Kami	Humla/ Sindhupalchok	1. Untouchability 2. Remoteness
14. Sarki	Tanahun/ Humla	1. Untouchability 2. Lack of sources of cash income
15. Damai	Thehe, Humla	1. Remoteness 2. Untouchability 3. Lack of farmland, extra source of income
16. Badi	Banke	1. Untouchability and prostitution as a stigma 2. Landlessness 3. Lack of source of cash income

ECONOMIC JUSTIFICATION

1. The Project is designed to improve the quality and efficiency of primary education in Nepal by raising the quality of teachers through teacher training. Teacher training improves pedagogical skills and expands teachers' subject knowledge. The extensive teacher training that the Project will provide will raise teachers' competencies through improved and effective teaching methods, and enhance the quality of information imparted to students. Teachers' expanded subject knowledge and better pedagogical skills will enhance student learning: this will encourage parents to send their children to school, and students to stay in school. Thus, dropouts and repetitions will decrease, and more students will be able complete their grades on a year-to-year basis. The sensitization component of the Project will enhance teachers' sensitivity to the needs of various members of the student body, especially girls and members of disadvantaged groups, and will improve the latter's enrollment and retention rates. The fellowship component, which awards teacher training scholarships to females, will further strengthen the potential benefits of the sensitization component. The greater number of primary school graduates and improved educational outcomes will enhance not only the quality of entrants to Nepal's labor market but also their number, and thus further contribute to Nepal's development.
2. The cost-benefit analysis of the Project is at best indicative. The benefits on which values have been determined are first-round effects. Education generates positive externalities and long-term social benefits to which no monetary values are assigned in this analysis. These social benefits include reduced fertility rates and improved health outcomes. Education is associated with reduced fertility rates, higher utilization of health services, improved nutritional status, and more equitable distribution of resources within the household. All these benefits are intergenerational.
3. During project implementation, 32,000 teachers will complete basic training, another 41,000 will complete the integrated packages 2 and 3, and 34,000 more will complete package 4. Additionally, preservice training will be provided to about 15,000 teachers.
4. The economic benefits of the Project are calculated from the market value of the additional pupil years completed every year due to the Project. The period of time over which these benefits can be enjoyed depends on how long the trained teachers remain in the system. The assumptions of the cost-benefit analysis are based on the assessment of education experts in Nepal.¹ Teachers are employed for 22 years on average, implying an attrition rate of about 4.5 percent. Better quality teachers are assumed to produce the following² by the end of the project implementation period: (i) the dropout rate falls from 13 percent to 12.6 percent, and (ii) the repetition rate decreases from 24.5 percent to 23.3 percent. Over 22 years, the close to a million additional pupil-years completed will lead to greater earnings for the students.
5. The economic costs comprise the project investment, and the public and private unit costs for each additional pupil-year completed. Public costs are the government expenditures to educate each child per year in primary school. Private costs are incurred by the families and include the cost of books and school supplies, transportation, and food among others.

¹ The experts consulted were Dr. B. Thapa, Education Economist; Dr. G. M. Shrestha, Education Specialist; and Mr. J. R. Giri, Education Management Specialist.

² The assumptions were taken from the preparation documents of the Basic Primary Education Program II.

6. Nepal's economy is mainly agricultural; it is characterized by a high unemployment rate and reduced labor mobility. In view of this, the working life benefits of an additional year of primary education are conservatively assumed to accrue for a reduced period of 10 years. The other assumptions and parameters used in the economic analysis are shown in Table A11.1.

Table A11.1: Parameters and Assumptions for the Base Scenario

Parameter	Value
Exchange rate (July 2000)	\$ = Rs74.928
Discount rate	12 percent
Annual primary level dropout rate (without project)	13 percent
Annual primary level dropout rate (with project, end of implementation)	12.6 percent
Annual primary level repetition rate (without project)	24.5 percent
Annual primary level repetition rate (with project, end of implementation)	23.3 percent
Teacher attrition rate	4.5 percent
Average monthly salary of an agricultural worker	Rs1,124 ^a
Public unit cost per annum of an additional primary student	Rs1,700 ^b
Private unit cost per annum of an additional primary student	Rs612 ^c

^a Nepal Labor Force Survey shows that approximately 80 percent of Nepalese workers are in the agriculture sector and only about 20 percent are in the wage sector.

^b Public unit costs were calculated utilizing the Ministry of Finance provisional budget estimates for FY2000-01.

^c Private (household) unit costs have been calculated at the rate of 36 percent of public unit costs, which is private: public unit cost ratio identified by the National Living Standards Survey (NLSS), 1996.

7. Table A11.2 shows the schedule of economic benefits and costs. The economic internal rate of return (EIRR) of the Project is 21.9 percent, and is greater than the hurdle rate of 12 percent. This does not yet include the cited nonquantified social benefits.

Table A11.2: Economic Rate of Return and Net Present Value

Year	PV of Economic Costs (Rs million)	PV of Economic Benefits (Rs million)			Total	NPV of the Project at 12 Percent (Rs million)
		Reduced Dropout Rate	Reduced Repetition Rate	Improved Access		
2002	323.8	-	-	-	-	(323.8)
2003	239.8	-	-	-	-	(563.6)
2004	246.5	38.1	114.2	4.9	157.2	(653.0)
2005	227.1	68.1	204.3	6.6	278.9	(601.1)
2006	226.5	91.3	274.0	7.8	373.1	(454.5)
2007	201.3	109.3	327.9	8.7	445.9	(210.0)
2008	101.2	122.6	367.8	9.3	499.8	188.6
2009	86.6	104.5	313.6	8.3	426.4	528.5
2010	73.9	88.9	266.6	7.4	362.9	817.4
2011	63.0	75.3	225.9	6.6	307.8	1,062.2
2012	53.2	63.3	189.8	5.9	259.0	1,268.0
2013	44.9	52.9	158.8	5.3	217.1	1,440.1
2014	37.7	44.1	132.3	4.7	181.1	1,583.6
2015	31.8	36.9	110.7	4.2	151.8	1,703.6
2016	26.7	30.7	92.0	3.8	126.5	1,803.5
2017	22.3	25.3	76.0	3.4	104.7	1,885.9
2018	18.5	20.8	62.3	3.0	86.0	1,953.5
2019	15.2	16.8	50.5	2.7	70.0	2,008.3
2020	12.4	13.5	40.4	2.4	56.3	2,052.2
2021	10.0	10.6	31.9	2.1	44.6	2,086.8
2022	8.0	8.2	24.6	1.9	34.7	2,113.5
2023	6.2	6.2	18.5	1.7	26.3	2,133.6

Economic Internal Rate of Return = 21.9 Percent

Net Present Value = Rs2,133.6 million

PV = present value.

8. Sensitivity analysis shows that when there is no improvement in the dropout rate, and benefits are derived solely from reduced repetitions, the EIRR is still 14 percent. When repetition rates are halved while dropout rates remain decreasing, the EIRR is 11 percent.