Document of

The World Bank

Report No. 14865-TR

STAFF APPRAISAL REPORT

TRINIDAD AND TOBAGO

BASIC EDUCATION PROJECT

OCTOBER 26, 1995

Human Resources Operations Division
Country Department III
Latin America and the Caribbean Region

Currency Equivalents

Currency Unit = Trinidadian Dollar (TT $)
TT$1.00 = US $0.17 (June 1995)
US$1.00 = TT$ 5.85 (June 1995)

Fiscal Year
January 1 - December 31

Academic Year
September 1 - June 30

PRINCIPAL ABBREVIATIONS AND ACRONYMS USED

CEE	Common Entrance Examination
CEO	Chief Education Officer
CXC	Caribbean Exam Council General Proficiency Exam
DCD	Division of Curriculum Development
DEP	Division of Educational Planning
DES	Division Educational Services
DRE	Division of Research and Evaluation
DSS	Division of School Supervision
ECCE	Early Childhood Care and Education
GORTT	Government of the Republic of Trinidad and Tobago
IBRD	International Bank for Reconstruction and Development
ICB	International Competitive Bidding
IDB	Inter-American Development Bank
LIB	Limited International Bidding
LRC	Learning Resource Center
MOE	Ministry of Education
NCB	National Competitive Bidding
NCECCE	National Council on Early Childhood Care and Education
NIHERST	National Institute of Higher Education, Research, Science and Technology
NTFE	National Task Force on Education
OJT	On the Job Training Program
PCU	Project Coordinating Unit
PS	Permanent Secretary
SBMP	School-Based Management Program
SERVOL	Service Volunteered for All
SIPs	School Improvement Plans
TAT	Technical Assistance and Training
TOT	Training of Trainers
UNDP	United Nations Development Programme
UWI	University of the West Indies

TRINIDAD AND TOBAGO

BASIC EDUCATION PROJECT
STAFF APPRAISAL REPORT
Table of Contents

This report is based on pre-appraisal and appraisal missions that visited Trinidad and Tobago in January and May 1995, respectively, and consisted of: World Bank Staff: Joel Reyes, Mission Leader and Task Manager, Julian Schweitzer, Division Chief, and Michael Potashnik, Education Project Advisor (LA3HR); and Hoveida Nobakht (PMDTR), Consultants: Eid Dib and G. Brest Van Kempen (architects), Ronald Shepherd (curriculum and instruction expert) and David Weikart (ECCE expert). At Headquarters: Arun Joshi (MN2HR), Karen Lashman and Ernesto Cuadra (LA3HR) provided feedback and support during the early stages of the project. In support of project preparation, Kin Bing Wu (LATDR) authored the study of education financing in the country (14628-TR); General Coordination and Support: Aracelly Woodall assisted in preparing the document's graphics and annexes; Peer Reviewers: Ward Heneveld (AFTHR) and Robert Prouty (AF5PH). The Division Chief, Director and Project Advisor for this project are, respectively, Julian Schweitzer, Yoshiaki Abe and Robert Crown.

Basic Data Sheet
1994

I. Area and Population	
Total Area ('000 sq. km.)	5.128
Total Population (million)	1.3
Urban Population (percent of Total)	66
Total Fertility Rate	2.8
Average Annual Growth Rate (percent)	1.3
Crude Birth Rate	24
Crude Death Rate	6
II. Health	
Life Expectancy at Birth (years)	71
Infant Mortality Rate	15
Maternal Mortality Rate	89 (1988)
Prevalence of malnutrition (under five)	5.9 (87-1992)
III. Education (%)	
Net Pre- primary School Enrollment	43
Net Primary School Enrollment	96
Net Secondary School Enrollment	75
Net Tertiary	7
Primary Pupil/Teacher Ratio	26
IV. Economic	
Female Share of Labor Force (percent)	30
GNP per Capita (in US $)	3, 740
Average Annual Rate of Inflation (percent)	
1970-1980	18.5
1980-1992	3.9
Public Expenditure on Education	
percent of GNP	
1985-1987	4.8
1991-1993	4.0
percent of Total Government Expenditure	
1985-1987	12.7
1991-1993	13.1
Public Current Expenditure on Education by Level (percent; 1993)	
Administration & Services	7.30
Pre-primary	0.16
Primary	40.8
Secondary	31.7
Vocational and Technical	4.0
Teacher Training	2.2
Tertiary	10.9
Unit Cost per Child per Year (US $)	
Pre-primary	124
Primary	353
Secondary	482

Sources: WDR 1994, TDE 1994, UNESCO YB 1991 and WB Report #14628TR

TRINIDAD AND TOBAGO

BASIC EDUCATION PROJECT

Loan And Project Summary

Borrower:	The Republic of Trinidad and Tobago
Implementation Agency:	Ministry of Education (MOE)
Beneficiaries:	MOE, Regional Educational Districts, Public and Government-Assisted Primary Schools, and NGO-operated Pre-schools.
Poverty Category:	Program of Targeted Interventions.
Amount:	IBRD Loan of US$51 million (including US$500,000 to be financed retroactively).
Terms:	Repayment in 15 years, including a 3-year grace period, with annuity-based payment schedule, and interest at the Bank's standard variable rate.
Commitment Fee:	0.75 percent of undisbursed loan balances, beginning 60 days after signing, less any waiver.
Financing Plan:	See paragraph 4.5.
Net Present Value:	N/A
Staff Appraisal Report:	No. 14865-TR
Map:	IBRD No. 27477

1. INTRODUCTION

A. The Economic and Social Setting

1.1 Trinidad and Tobago is a dual-island country in the Caribbean with a population of approximately 1.3 million, growing at 1% a year. The islands' combined relatively small size of 5,128 square kilometers makes Trinidad and Tobago a densely populated country. Its inhabitants are primarily of African, East Indian and mixed decent. The economy prior to independence (1962) was sustained by sugar exports, while petroleum became increasingly more important after independence. GNP per capita rose to almost $7000 during the early 1980s due to the continued rise in oil prices since 1974. Growth contracted after the price of oil declined and GNP per capita fell swiftly, standing at about $3700 in 1994. Unemployment has consistently remained a problem, never falling below 10%; it now stands at 16.5% (38.4% and 29.6% respectively in the 15-19 and 20-24 age groups).

1.2 Cuts in public recurrent expenditure and investment followed the fall in oil prices and in government revenue. Social services such as public housing, education and training, health, and welfare programs were the most affected. Amid the economic decline, poverty increased. In 1981, only 3.5% of households were living in poverty; by 1988, this figure increased to 15%. Some 22.5% of household incomes were below the poverty line (around US$116/month) in 1992. The Government's mission has been to promote sustainable economic growth and enhance the quality and efficiency of public social services. Recently, prudent fiscal and monetary policies, including reform programs in trade, tax, price controls, and foreign exchange transactions have resulted in resumption of economic growth. In 1994, positive growth was recorded for the first time in the last decade as GDP grew by 4 percent.

2. THE EDUCATION SECTOR

A. The Education Structure

2.1 The basic education structure in Trinidad and Tobago comprises: (i) two years of early childhood care and education (ECCE) for about 40% (23,500) of the 3-4 age cohort; (ii) seven years of universal schooling, two Infant and five Standard levels, for the 5-11 age cohort (about 200,000 children); (iii) two post-primary grades (for children not gaining access to a secondary school); and (iv) five secondary grades. Secondary education enrolls about 98,000 students and is divided in two sectors. The Traditional Sector schools offer only an academic track of five secondary (Form-level) grades, followed by two additional pre-university ("A" level) grades. The New Sector, initiated in 1972 to expand access, offers courses in both academic and technical/vocational subjects. The New Sector comprises the junior secondary schools, the senior secondary, senior comprehensive and composite schools.

2.2 Two exit exams allocate secondary school places and track children in schools of varying quality. The Common Entrance Exam (CEE) is administered to Standard 5 students for placement in secondary schools and tracking either in the traditional sector (considered the highest quality schools) or in any of the various types of schools in the New Sector. Non-placed students may enter the post-primary grades at the primary schools; attend private secondary schools; or drop out. The

Caribbean Examination Council (CXC) must be passed to enter the two additional pre-university (A-level) grades.

2.3 School governance and finance are either government, government-assisted or private. Assisted schools are owned by non-governmental bodies (predominantly churches); financially aided by the Government; and administered jointly by the MOE and the respective Denominational Church Boards. Government pays salaries and personnel benefits of all teachers in government and assisted schools, and 75% capital costs for assisted primary schools, 66 2/3% for assisted secondary schools and 100% for government schools. Private schools are self-financed. In 1993, the government, assisted, and private schools, respectively, enrolled 30%, 67% and 3% of students in primary education and 77%, 18% and 4% in secondary schools.

B. The Institutional Setting

2.4 The MOE is the administrative authority for all levels of education, except university. The MOE is responsible for: (i) setting educational policies and strategies; (ii) defining curriculum and other norms; (iii) overseeing the quality of educational services provided by the public and private sectors; and (iv) planning, programming, and budgeting improvement projects in the education system. The Cabinet, under the advice of the MOE, makes policy related to curriculum type, school calendar, teacher qualifications, and administrative divisions and functions in the education system.

2.5 On-going public sector reforms are providing greater autonomy to the MOE in the management of its personnel and financial resources. Traditionally, the Ministry of Finance (MOF) manages and pays pensions and gratuities of teachers and civil servants in the education sector and the Central Tenders Board approves most MOE procurement contracts. In addition, the Teaching Service Commission and the Public Service Commission (under the jurisdiction of the Ministry of Public Administration) respectively manage the hiring and promotion of teachers and principals and of the administrative personnel in the education sector. Under the newly introduced guidelines, the MOE will lead and manage the process of interviewing and selection of new personnel and promotion. Direct MOE procurement thresholds will be considerably increased. The MOE, in turn, is committed to utilize its greater managerial and financial autonomy to support regional and school-based planning, decision-making and management.

2.6 Other government and non-government agencies play a role in the education system. The Ministry of Consumer Affairs and Social Services (MOCASS) provides some funding for ECCE. The Ministry of Works and Transport manages resources earmarked for the maintenance and repair of all public properties and provides technical assistance in the design and construction of public infrastructure, including government school facilities. In 1988, the government handed over the administration of government assisted ECCE centers and various adolescent training programs to a community-based NGO, SERVOL (Service Volunteered for All). At present 145 ECCE centers are managed by SERVOL. NGOs, through sub-contracting arrangements with the Government, can provide ECCE teacher training, furniture and equipment, teacher salaries and administration support. The communities, where the preschool centers are located, are expected to establish a board of education to manage the schools and provide for maintenance of the premises. The Government is continuing its partnership with NGOs as ECCE access is expanded.

2.7 Two permanent councils provide advice to the MOE and the Cabinet. The National Task Force on Education (NTFE), created in 1991, consists of leading educators from the University of

West Indies (UWI) and local NGOs, in addition to MOE, regional and school staff. A comprehensive education policy paper was presented to Cabinet after extensive, country-wide stakeholder consultations (individuals, groups and institutions). In 1994, members from the MOE, Ministry of Health, Ministry of Family Services, NGOs, UWI, the Teachers' Union, and other religious and village councils established the National Council for Early Childhood Care and Education (NCECCE). The NCECCE's secretariat is located within the MOE and coordinates and manages inter-ministerial ECCE responsibilities. Other Cabinet-approved policies, yet to be implemented, include: (i) expanding responsibilities and authority of the regional education divisions to improve services to the schools, and (ii) restructuring the MOE to increase the efficiency and effectiveness of its services and improve MOE policy and evaluation responsibilities.

C. Educational Spending[1]

2.8 Public spending on education is currently estimated at above 4% of GDP and about 14% of the budget. The economic downturn of the 1980s seriously affected the country's education system financing. Although percentage allocations remained stable, total education expenditure in real terms declined by 27% between 1985-93; recurrent expenditure declined by 25%. Educational expenditures were reduced by freezing teachers' salaries and drastically cutting resources for school maintenance and subsidies for textbooks and other instructional materials and supplies. During 1985-87 capital expenditures amounted to only 1.5% of total public expenditures on education. During 1991-93, education investments improved to 5.3% of total education expenditures, but are still lower than international standards. The primary and secondary subsectors experienced respectively a 33% and 36% decline between 1985-93. Over the same period, as the primary school age population increased and budgets shrunk, per-student primary level recurrent expenditure declined by 42% in real terms. In 1991-93, per student recurrent public expenditure as a percentage of GDP per capita equaled 10% for primary education, 16% for secondary education, 29% for vocational and technical education, and 161% for university.

2.9 Public spending on education as percentage of GDP has been relatively stable in Trinidad and Tobago, about 4-5 percent of GDP. Thus, it is expected that with renewed economic growth additional financial resources would be available for education investments and sustainability. Long-term fiscal conditions seem optimistic. In 1994, GDP grew by 4 percent, after a decade of almost uninterrupted economic decline. While most of this growth remains attributable to the oil and gas sector, a very positive development has been that, for the first time in two decades, this growth will come from improvements in productivity rather than from increases in world prices. Finally, central Government operations have improved considerably from an average overall deficit of 5.3 percent of GDP over 1983-92 to a small deficit of 0.3 percent in 1994. It is estimated that the economy would grow between 2-3% per annum in the medium term and to 4-5% by the end of the decade.

D. Selected Issues in Basic Education

(1) Overall Status

2.10 Trinidad and Tobago has valued education highly. Primary education up to age 12 was made compulsory and free in 1961 and, in the 1970s, secondary education access was expanded

[1] Wu, Kin Bing. 1995. "The Financing of the Education in Trinidad and Tobago, 1985-1993." WB Report #14628-TR.

successfully from 22% to 70%. Today, basic education net enrollment rates (96% primary, and 75% secondary), in-service training (83%), and female participation and completion (51% of total enrollment and 97%, respectively) compare favorably to other Latin American and Caribbean countries. Girls also perform better than boys at all levels of education. Repetition rates in primary schools are less than 2% and dropout rates are less than 0.5%, except in Standard 5. About 12% of Standard 5 students may voluntarily repeat to re-take the CEE. Students who have exhausted their both chances at the CEE continue in the extending two year primary program or may drop out of the education system.

2.11 The Government, however, is concerned about declines in the quality and equity of teaching and learning. Low quality is proxied by an overall achievement level decline in the system. Equity pertains to decreasing differences in quality among schools and in access to quality education among socio-economic groups. The findings of the NTFE specified the critical issues in the education sector, including: (i) increasing the quality ECCE and the access for poor children; (ii) improving educational achievement at the primary level; (iii) strengthening the monitoring of the education sector's performance; (iv) upgrading physical conditions for teaching and learning; (v) increasing access to quality secondary schools; and (vi) improving management efficiency in the education system.

2.12 Many of these needs are interrelated, each compounding the effects of the others. Children without access to quality ECCE services come less prepared (both physically and psychologically) to primary schools. The primary schools they attend are beset with quality problems, which adversely affect their performance. Unprepared primary education graduates move into secondary schools varying widely in quality, while some graduates do not gain access at all. To address these critical problems, a management system capable of monitoring, planning and developing policies for the disadvantaged and responding, through decentralized units, to local demands and needs is vital.

(2) Limited Access and Low Quality ECCE Services

2.13 Of approximately 60,000 children in the 3-4 age category, only 39% currently have access to ECCE programs. Among the lowest socio-economic quintile, 4500 or about 37.5% are enrolled in ECCE centers. Only 148 public centers cater to disadvantaged communities. About 700 private ECCE centers provide services to 18,000 children of able-to-pay families. Over 50% of the private centers are unregistered and quality varies widely. Public and private preschools lack a coherent, theoretically based, validated and replicable curriculum model. Lack of quality control of existing ECCE services (registration, monitoring and support) has resulted in inconsistent standards for training, physical plant, outdoor play space, instructional materials, equipment and teachers' compensation. The Government's ECCE objectives are to increase access and improve the cognitive, social and emotional readiness of low income children entering primary schools.

(3) Insufficient Investment in Physical Facilities

2.14 Traditionally, primary schools have been widespread and accessible across the country. More recently, internal migration has left some rural areas with deserted schools while schools in urban areas and important settlements are over-populated. Capital investments in school facilities during the 1980s were minimal. By and large, physical infrastructure requirements have not kept pace with increasing demand. Between 1985-93, public and assisted primary schools' enrollment increased by 15% and totaled 198,000 children. Between 1995-2,000, the 10-14 age cohort is expected to increase by 11%. By the year 2,000, the system would require some 26,500 additional primary school places and 7,000 secondary places. Demand for school places has been appeased by overcrowding. In spite of a reasonable average pupil-to-teacher ratio of 26-28 at the primary level, in most primary schools, open classrooms, poor acoustics and limited space are the norm. Overcrowded classrooms are seriously hampering quality primary schooling.

2.15 Seventy-five percent of existing primary schools were built 35 years ago and many are in dilapidated conditions.[2] Crumbling walls and roofs as well as water and sanitation issues increase the serious safety problem facing primary schools. Seriously damaged schools have had to be demolished, while the children are placed in temporary locations. Finally, heavy and bulky furniture in most primary schools does not provide a conducive and flexible environment for teaching and learning. Future physical improvements should emphasize modular designs, self-contained classrooms, light-weight desks to facilitate re-arrangement, display tables, wall space for charts and exhibits, as well as staff rooms, office space, and libraries. The Government is contracting private sector firms to improve construction quality and reduce costs.

2.16 At the secondary level, the physical capacity needs are compounded by rising demand, limited capacity and cost-ineffective design and construction of schools. The average transition rates from primary to secondary school declined from 82% in the early 1980s to about 75% in 1990. Transition rates for the 1995-96 academic year showed a further decline to 66%. Although such transition rates still compare favorably to other neighboring countries, in Trinidad and Tobago demand for secondary school remains high, the continuous decline is alarmingly rapid and social discontent is rising. In certain regional districts and in the island of Tobago capacity and transition rates have fallen well below the national average (ranging from 38% to 63.1%). Nationwide, over 95% of Standard 5 take the CEE exam to enter secondary school; however only a portion of these students are guaranteed a place. The Government is seeking to generate substantive financial resources and a cost-effective strategy to expand access at the secondary level. In the meanwhile, the country needs to take immediate steps to prevent transition rates from falling even further.

(4) Low Levels of Educational Achievement

2.17 The GORTT is concerned with the declining quality of education and the variability of quality among primary schools. In 1994, the mean CEE scores of primary students from government and assisted schools showed that on average 40% of 11+ age children scored below 40% of the maximum score (the minimum desirable marks) in mathematics and 52% in English language arts. Distribution of scores varies widely among schools. In some schools up to 90% of Standard 5 students did not score the minimum desirable marks at the CEE. Similar poor results were shown by an international reading assessment study undertaken in 1992 by Trinidad and Tobago's 9-14 year-olds.[3]

---

[2] During 1968-83, Trinidad and Tobago invested heavily in secondary schools and was able to increase secondary level enrollments from 24% (the lowest ranked in Caribbean) in 1970 to 83% by the late 1980s (second only to Barbados). However, this success was achieved to some extent at the expense of the primary level, which infrastructure investments declined over the same period.

[3] Schleicher, Andreas and Jean Yip. 1994. "Indicators of Between-School Differences in Reaching Achievement." IEA, Mimeo.

(5) Quality of Instruction.

2.18 Country-wide stakeholders, consulted by the NTFE, agreed that primary education should emphasize "hands on" learning experiences and promote innovative models of achievement and assessment which are relevant to children's lives and their communities. The new socio-economic challenges confronting the country require a shift from text-book based and black-board delivered instruction, as well as from learning based on memorization and repetition. The GORTT seeks to support pedagogical improvements to facilitate active student involvement, opportunities for cooperation and problem solving, pro-social behaviors, initiative and self-empowerment.

(6) Curriculum Issues

2.19 Increasingly, schools, communities and parents in Trinidad and Tobago are questioning the primary level curriculum, focused on the subjects tested in the CEE: math, English language, science and social studies. The teaching of disciplines such as arts and crafts, music, drama and culture, which inherently make use of the socio-cultural context of the child and could motivate and facilitate learning, is almost non-existent. Yet, in spite of the traditional academic focus of the curriculum, some 50% of primary graduates have failed English language and mathematics in the CEE. In response, the teaching of literacy and numeracy is to be integrated into a well-rounded and socio-culturally sensitive curriculum.

(7) Quality and Availability of Textbooks and Instructional Materials

2.20 The Government's role in evaluation and recommendation of quality instructional materials in the past was limited, but is now increasing. Most schools, at their own discretion, change textbooks lists distributed to parents annually and quality among recommended titles varies widely. Parents have protested against the lack of standardization and constant replacement of titles. The GORTT is reassessing the need of a textbook evaluation committee to select and recommend a rationalized book list. Furthermore, some 30% of primary school children do not have textbooks. The poorest schools do not use any textbooks, relying more on workbooks and non-formal instructional materials. The GORTT's stated objective is to reduce the cost of education for needy families by financing cost-effective mechanisms to provide instructional materials through loan schemes for textbooks and other curriculum materials.

(8) Upgrading Nationwide Testing, Assessment and Evaluation

2.21 The CEE is a one-time placement test for access into secondary school. The CEE provides information on learning attainment levels for only Standard 5 students. There is no on-going nationwide monitoring of student achievement at lower grade levels. As a result, children with learning difficulties are not identified and supported on time to improve their performance. The NTFE has recommended the development of a continuous diagnostic testing and remediation support system, supported by two earlier national diagnostic tests in Standards 1 and 3. On a sector-wide basis, the MOE lacks relevant, longitudinal information on student achievement to timely monitor and evaluate its services and develop appropriate policies and improvement plans.

(9) Overcentralized Management of the Education Sector

2.22 MOE administrative functions are overcentralized. The MOE manages directly both disbursement and procurement of limited school resources (an average of $US600/yr per primary school) earmarked for school materials and maintenance of facilities and equipment. Each month, schools must inventory, report and request from the MOE consumables (paper, chalk, cleaning utensils, bathroom tissue, etc.) for operating their schools. Additionally, the MOE manages, monitors and authorizes leave, attendance and discipline of each teacher in the system. Recently, Cabinet authorized the development of a strategic plan to transfer decision making and authority over the above-mentioned management functions and resources to the regional and/or school levels.

2.23 Regional personnel[4] are responsible for classroom observation, pedagogical advice, curriculum support and instructional feedback. In addition to their pedagogical responsibilities, most regional supervisors spent their time solving school staffing and facilities problems and confronting bureaucratic bottlenecks between the MOE and the schools. Management and planning of regional services are critically fragmented. Regional staff are managed mostly by the Director of School Supervision. Specialists in areas such as ECCE, mental health, learning difficulties and human resources are not available at a regional or school level.

(10) School-Community Linkages

2.24 The GORTT recognizes the quality of education is dependent on both giving schools more autonomy in planning and managing educational resources and improving the linkages between the school and the community. There are signals of readiness for school based management initiatives in Trinidad and Tobago. The best run schools plan activities to increase community participation, provide teacher training and improve curriculum delivery. Most of these schools organize their own fund-raising events; budget these additional sources of capital and manage their expenditures. In other schools, some challenges remain ahead. The Government plans to finance activities to promote in-school leadership skills, teacher motivation and support among schools and between schools and their communities. The NTFE has recommended so far the following areas which would benefit from stronger community-school relations and school-based management: programming of extra-curricular activities, classroom instruction support, development of school materials, and maintenance and minor repair of schools.

E. The Government's Strategy for the Sector

2.25 Trinidad and Tobago remains predominantly an oil and gas economy. To complement its national objectives to diversify trade, encourage private investment and strengthen the public sector, the GORTT seeks to improve the role of the education system in supplying a well-prepared labor

[4] The eight educational regions are composed of the following staff: one supervisor III (secondary schools administrator), one supervisor II (primary schools administrator), 3-4 supervisors I (primary school supervisors), 2-3 math curriculum facilitators, 3-4 reading facilitators (mainly for primary schools) as well as one facilitator per region for physical education (PE), Agricultural Science, Science, Social Studies, Art & Craft and Music. Each region has an average of 60-70 schools. In addition, the Special Education Unit includes 2 special education specialists for the entire country.

force. Investment in human capital is required for faster economic growth, successful competition in global markets, and reduction of socio-economic disparities.

2.26 The GORTT has made education reforms the centerpiece of future social development strategies. At the basic education level, three initial issues are paramount in the Government's education strategy: (a) preparing children for primary school; (b) providing quality education at the primary level and easing the transition from primary to secondary schools; and (c) improving public institutional capacity to accomplish (a), (b), and other educational objectives effectively and efficiently.

F. Bank Role and Strategy

2.27 The project conforms to the World Bank Group Country Assistance Strategy, as discussed by the Board on March 30, 1995, which supports Trinidad and Tobago in resuming its economic growth and providing a strong human and capital base for sustainable development. The project directly supports this strategy emphasizing the need to increase and effectively and efficiently utilize investments in human resources. Key Bank objectives for the country include: (i) modernizing and rationalizing the public sector; (ii) assisting in the diversification of the economy; (iii) increasing public investment in infrastructure and the social sectors; (iv) improving the effectiveness of government services to the education sector; and (v) complementing IDB programs by financing infrastructure and safety nets.

2.28 Bank involvement coincides with the Government's demonstrated commitment and ownership of its social programs, in particular education. The MOE's clear intentions, as stated in the NTFE, are to reduce disparities in the education system, enhance the quality of education, and achieve an effective and efficient management of the sector. The Bank's involvement through this project will revitalize capital investments in the education sector, which were drastically reduced during the last decade, catalyze economic growth, and assist in developing a solid human resource base for sustainable development. Increased access to quality education would contribute to a more equitable income distribution.

G. Lessons of Experience

(1) Bank-Wide Education Projects

2.29 Design of the proposed project benefits from the following lessons from research and investment experiences in education:

a) *Lesson*: Strong economic performance of countries that have risen from low-income levels has been linked to strong, sustained spending on basic education. *Project Response*: As a solid foundation for future investments in human resources, the project will improve the quality of and access to preschool and primary education.

b) *Lesson*: Desired changes to strengthen the performance of basic education must start at the school level; teachers, parents and the community must lead the reform process. *Project Response*: All project components support changes at the classroom level and promote school-community linkages.

c) *Lesson*: The capacity to manage change effectively and flexibly must be institutionalized at all levels in the education system. *Project Response*: The project will finance self-assessed improvement plans of the MOE, regional divisions and schools. Improvement subprojects provide a flexible mechanism to allocate resources to changing needs, as well as encourage ownership and empowerment. Project monitoring and evaluations will provide timely information for any necessary implementation adjustments.

d) *Lesson*: Significant educational change demands long-term, stable political support. *Project Response*: Bank involvement responded to the Government's demonstrated commitment and ownership of its education programs, as evidenced by the support given to the NTFE.

e) *Lesson*: Program initiatives and interventions should be multi-faceted and inter-related. *Project Response*: The proposed project would follow up on an initial primary education project financed by IDB and would improve linkages across sub-sectors (ECCE, primary and secondary levels) and across issues of educational quality, equity and managerial efficiency.

f) *Lesson*: While building and maintaining commitment, three interventions are critical in education investments: administrative development, in-service teacher training and classroom level processes. *Project Response*: The project components take into account and support each of these critical interventions.

(2) Prior World Bank-Funded Education Projects in Trinidad and Tobago

2.30 Three education sector loans totaling US$27.7 million were provided before 1980 (Loan No. 564-TR, October 1968; Loan No. 862-TR, October 1972; and Loan No. 1722-TR, May 1979). Loan No. 1722-TR was not completely disbursed due to cost overruns in civil works and serious delays in establishing and staffing the PCU. The two earlier education investments achieved their implementation and development goals successfully. In 1984, the Bank graduated Trinidad and Tobago from IBRD lending. In 1991, the Bank, amid the economic downturn, resumed its lending program providing an educational loan to support vocational and technical training for out-of-school youth. Lessons from these projects include:

a) *Lesson*: Project success requires full commitment of the GORTT supported by appropriate policies. *Project Response*: The project evolved out of the 1993-2003 Education Policy Framework and has the full support of the Cabinet, the MOE, the NTFE, regional divisions and school staff.

b) *Lesson*: Long-term assessment of financial sustainability and management capacity are key to project success. *Project Response*: During project preparation, the Bank conducted a sector study of education financing in the country; assessed project recurrent costs implications for the MOE budget during and after implementation; and provided recommendations on financial sustainability. The project benefits from the recent appointment of an efficient and project-experienced MOE senior administration. Indicators to monitor the increasing PCU implementation capacity were established.

c) *Lesson*: Executing agencies should strongly seek stakeholders' participation through information sharing and close collaboration. *Project Response*: The MOE would promote participation through information campaigns; regular stakeholders workshops; direct financing of viable community proposals, regional plans and school improvement plans (SIPs); decentralized procurement in subcomponents with NGO-community participation; and support for the implementation of an education management decentralization strategy.

d) *Lesson*: Private sector participation enhances quality and efficiency. *Project Response*: Private sector firms would be involved in the design, supervision and construction of primary and secondary schools. NGOs will manage ECCE activities and assist in the formulation of SIPs. The newly established MOE's procurement arrangements and procedures will support the timely bidding and procurement of goods and services. Distribution of goods would make use as much as possible of existing private supplier networks.

3. THE PROJECT

A. The Project Objectives

3.1 In line with the NTFE findings, the objectives of the proposed project are to: (i) enhance the cognitive and social development of children in ECCE to prepare them to enter primary education; (ii) improve the quality of teaching and student achievement in primary education; (iii) improve the physical infrastructure of facilities for ECCE and primary and secondary education; and (iv) strengthen the management and institutional capabilities of the education sector at all levels. At the primary school level, the project seeks to improve effective leadership, teaching and assessment methods, coaching among teachers, and local flexibility and autonomy. A follow-up project would focus on improvements in secondary education.

B. Project Description

3.2 The project comprises four principal components: ECCE Quality and Access (US$8.59 million), Primary Level Teaching and Learning Quality (US$18.21 million), Upgrading the Physical Environment for Teaching and Learning (US$81 million), and Education Management and Institutional Strengthening (US$13.90 million). Estimated costs in parenthesis include contingencies, all incremental recurrent costs, and local taxes.

C. Project Components

Component A. ECCE (US$8.59 Million)

3.3 The ECCE Component would finance two subcomponents: the quality subcomponent would support investments for on-going child development programs and the equity subcomponent would increase access of the poorest children to new ECCE centers. The MOE would implement the ECCE component under the auspices of the newly established NCECCE, an umbrella body for various ministries and agencies involved in the ECCE sector. Additionally, NGOs would assist poor communities in submitting viable proposals for ECCE investments. Approved NGOs will sign a contract with the MOE to support their communities in the construction program and in managing the ECCE centers. The adoption of the ECCE Program Operational Manual is a condition of project effectiveness (para. 7.2.a). Prior to disbursements for ECCE community proposals, selected proposals would have been approved on the basis of the ECCE Program Operational Manual (para. 7.3.b).

Subcomponent A.1. Upgrading Quality (US$2.46 Million)

3.4 First, the project would improve the in-service training provided by ECCE training institutions and the supervision activities of ECCE field officers and regional facilitators. The project would finance training of trainers (TOT) programs, through the NCECCE, for up to 55 individuals, including ECCE trainers, field officers and regional facilitators. External consultants would assist NCECCE personnel to design and conduct the TOT programs during the first two years of the project. During the third year, the NCECCE would conduct its own TOT workshops. Subsequently, consultants would assist ECCE training institutions in modifying their curriculum to conform to the training and supervision standards which will be required by the NCECCE. ECCE field officers and regional facilitators would train, supervise and support an estimated 350 existing teachers and 300 proposed new teachers[5] learn to apply new childcare and pedagogical skills. The improved in-service training will include regional training workshops for those existing teachers without a pre-service certificate (about 45% of total existing teachers).

3.5 Second, the project would rehabilitate existing public ECCE centers and provide them with furniture, equipment and instructional materials to bring them up to acceptable operating standards. 50 centers would be rehabilitated. The other 100 existing ECCE centers serving poor communities would be provided with furniture, equipment and instructional materials as requested. The rehabilitation of facilities and the procurement and distribution of furniture and equipment would be managed by local NGOs, supported partially by community (business and individual) contributions. Project contributions for civil works, furniture and equipment for centers to be rehabilitated are roughly estimated at US$9,000. Further, the project has earmarked US$500 per center to purchase instructional materials. The MOE-developed ECCE Fund Operations Manual details the criteria for NGO and community participation in improving and maintaining ECCE centers.

3.6 Third, the project would strengthen the monitoring capacity of the NCECCE. The project would provide technical assistance, furniture, equipment and staff costs (the latter on a declining basis) to establish a Secretariat office for the NCECCE, which would be located in the MOE. The Secretariat, under the direct supervision of the CEO and the NCECCE, would have overall responsibility for programming, coordinating and monitoring ECCE activities. Technical assistance would support the NCECCE in establishing minimum norms and standards for running preschool centers and for ECCE teacher training.

3.7 To support the activity in para.3.6 above, the project will finance a total of 16 new ECCE facilitators posts on a declining basis. The ECCE facilitators would be responsible for: (a) registering all preschool centers (both public and private) in their areas; (b) supervising closely ECCE centers with the intention of providing feedback to teachers and ensuring minimum norms and standards; and (c) organizing and coordinating, as needed, stakeholders meetings to discuss ECCE problems and/or improvements (see Annex J for project recurrent costs implications).

Subcomponent A.2. Increasing Access (US$6.12 Million)

3.8 First, the proposed subcomponent would increase access to ECCE centers for some 2,250[6] children in poor communities.[7] Some 50 new community preschool centers would be built, furnished and equipped. The NCECCE would invite proposals for the building of new centers from community councils (see sample invitation in Annex A-2). Proposal would pledge community construction and maintenance contributions. The ECCE Program Operational Manual lists: (i) the location of areas which would qualify for new community centers; (ii) the policies and administrative procedures to be used in managing the ECCE construction program and running of centers; and (iii) the upgraded standard design for centers with a capacity of up to 45 children.

---

[5] Includes 150 teachers for the new centers financed by the project and 150 teachers to meet demand from expected increases of additional privately or publicly financed new centers.
[6] This figure represents 50% of the GORTT's target for the next five years. Other ministries, funding agencies and the private sector would provide the resources for the construction of additional ECCE centers.
[7] The poorest communities would be identified by NCECCE from the Living Standard Measurement Survey and other data sources.

3.9 Second, the project will provide pre-service training scholarships for up to 350 prospective ECCE teachers.[8] Individual scholarships amount to TT$1,500 (approx. US$260) for a one-year, full-time training program. Trainees from low income communities, up to 55% of the total, could apply to receive an additional stipend of TT$3,500 (US$ 600) per academic year as a living allowance (boarding, meals, commuting etc.). The three existing ECCE training institutions in Trinidad and Tobago will conduct the pre-service training. The training agency with most experience in provision of ECCE services in low income communities will train up to 200 new teachers, which includes the 150 new teachers for the new project-financed ECCE centers.

3.10 Third, during the life of the project, the project would assist in expanding an existing Parental Outreach Program managed by NGOs. Trained Parent Outreach Workers (POWs) would work with parents at home to develop healthy childcare practices. The project would fund the training and salaries of some additional 25 POWs for a five year period. Salaries are estimated to be the equivalent to US$280/month.

3.11 To support the expansion of NGO-managed ECCE activities (paras. 3.8 and 3.10 above), the project will finance, during its first five years, increased Government contributions to local NGOs on a declining basis, which would subsidize, *inter alia,* the increased personnel cost of up to 300 new preschool teachers and 25 POWs. See Annex J for recurrent cost implications of increased contributions to ECCE NGOs.

Component B. Teaching and Learning Quality (US$18.20 Million)

3.12 This component would fund two inter-linked subcomponents to upgrade primary education quality: The Classroom Instruction and Curriculum Strengthening and the Instructional Materials subcomponents.

Subcomponent B.1. Classroom Instruction and Curriculum Strengthening (US$5.93 Million)

3.13 First, the subcomponent would finance the implementation of a school-based staff development program for primary schools' principals and teachers. The training activities would focus on improved instructional and assessment methods for the delivery of traditional subjects (English language arts, math, science, etc.) and of curricular disciplines, with renewed and greater interest, such as art and crafts, drama, and music.[9]

3.14 An initial activity will be the implementation of training-of-trainers (TOTs) workshops to study, recommend and design appropriate curriculum delivery and assessment methods. The TOT workshops will provide training for teacher colleges, regional staff, and selected principals and leading teachers. Subsequently, the project would finance the implementation of regional training workshops and seminars for principals and leading teachers willing to become curriculum advisors and coaches in their own and neighboring schools. At the school level, the project would support a coaching and support system by and for teachers and principals.

[8] Includes 150 teachers for project-financed ECCE centers, 150 for expected additional ECCE teachers demand and a 16% attrition and contingency margin.

[9] The short-term goal of aesthetics courses would be to provide primary school children the knowledge and appreciation of their culture and social context through artistic expressions. A longer-term goal would be to create linkages with traditional subjects (e.g., language studies, math, social sciences, etc.) to serve as a creative tool for curriculum delivery and assessment.

3.15 Through the coaching system, those principals and teachers who have been successful in implementing improved instructional techniques would support their colleagues in neighboring schools to adopt better pedagogical methods. Schools would receive an average allocation of US$350 per year in order to meet costs (materials, transportation, workshops, substitute teachers) incurred from the in-school support and coaching activities. The focus of the first cycle would be on cooperative teaching and integrated/holistic language approach. Lessons learned from the first cycle would be incorporated into subsequent cycles. Teacher Colleges, assisted by the project, will integrate improved pedagogical methods into their curriculum. Annex B-1 details the above-mentioned training strategy.

3.16 Second, to support the professionalization of primary school staff, the project would finance, over the life of the project, a part-time university (Bachelor in Education, B.Ed.) program for school principals, vice-principals, and distinguished teachers. Experts would assist the MOE in defining the specification of a "tailor-made" degree program to support the curricular, pedagogical, decentralization and community participation goals of the education sector. The MOE would invite proposals from universities, including the Faculty of Education of UWI, to provide a part-time, accessible and demand-driven B.Ed. program. An amount of US$1.4 million dollars have been earmarked for this program. The MOE-developed Training Services Manual specifies the selection criteria for B.Ed. students (as well as the operational procedures for the school-based in-service training program). Annex B-1 provides sample terms of reference for institutions interested in providing the B.Ed. program.

3.17 Finally, the project would support a pilot sub-project in the teaching of Spanish at the primary level (Standards 4-5).[10] Primary school Spanish courses would provide the basic foundation for the secondary level mandatory Spanish program. The project will finance four inputs: (i) Spanish language courses for up to 100 qualified teachers; (ii) introduction of Teacher Colleges' Spanish courses; and (iii) the design and implementation of a pilot sub-project during the fourth and fifth year of the project.

Sub-Component B.2. Textbooks and Instructional Materials (US$12.28 Million)

3.18 This subcomponent would assist the MOE in selecting and recommending quality textbooks, while financing a school-based loan scheme to make textbooks available to children of low income families. A new textbook selection committee would evaluate the content of textbooks and would provide schools and parents with recommended titles and average prices. Through the project, the MOE would subsidize textbooks from the recommended list for low income children (about 35% of enrollment) up to a maximum price per title. Books subsidized by the project would remain the property of the school, which would be required to loan them free of charge to poor students. Annex B-2 details the mechanism to target poor children for textbook subsidies.

3.19 Additionally, the project would complement school libraries (provided by a prior IDB project) with appropriate in-classroom reading materials, especially from Caribbean authors. The

[10] The new MOE foreign language policy evolved from the Government's goal to strengthen its international and economic relations with neighboring Spanish-speaking Latin America (the island of Trinidad is situated about 7 miles from the Venezuelan coast at its closest point). Spanish language courses are already mandatory in secondary schools.

project will assist the MOE to supply all primary schools with Standards 1-3 reading materials.[11] Educationally at risk schools would receive additional reading materials for infant 1-2 and Standards 4-5. After the life of the project the cost of repairing and replacing textbooks and reading books for low income children would be on average US$1.3 million a year. The yearly recurrent cost average on textbooks represents 0.7% of Government expenditures on education in 1994 (see Annex J for total project recurrent cost implications).

3.20 The project will allocate a budget of US$800 on average for each primary school to assist in purchasing visual aids and other (non-written) instructional materials. Each school would be responsible for selecting its own instructional materials from a set of eligible materials up to its budget limit. These teaching tools will support the delivery of traditional subjects (e.g., math, science, and social studies) and new subjects such as aesthetics (music, arts and craft, etc.) and foreign language (i.e., Spanish). A draft of the MOE-developed Instructional Materials Services Manual was reviewed by the Bank and details: (i) the mechanisms to target low income children for free provision of textbooks and reading materials and their procurement and distribution strategies and the (ii) the criteria and procedures for the allocation of instructional materials budgets.

3.21 Staff equipment and furniture would assist teachers to prepare their own instructional materials and manage their classrooms. An average amount of US$1600 will be allocated to each school to furnish and equip staff rooms. A computers-in-schools program will provide computers hardware and software for use in schools' staff rooms. Through an earlier IDB financed project, the MOE provided one computer to each government school. This project will provide additional computers to up to 100 government schools which participated successfully in the IDB program. Two hundred other schools could apply to receive initially one computer for teachers' use. As a prerequisite, participating schools would propose viable plans to improve school processes and teaching through the use computers. The Instructional Materials Manual details the selection criteria and operational procedures for schools participating in the computer program.

3.22 Finally, the MOE seeks to support the role of specialized teachers and curriculum facilitators in preparing written instructional materials such as workbooks, reading guides, and social studies booklets. The project would finance feasibility studies (e.g., demand and market constraints/opportunities and publishing and production capacity/competitive advantage) for the local development of written didactic materials. Some training would be provided in manuscript writing. The Learning Resource Center would be allocated a seed capital fund to support the development of instructional materials deemed viable and competitive by the feasibility studies. Teacher training workshops on self-developed and use of instructional materials would complement the inputs provided by this component. Teacher colleges will receive instructional materials funds to provide similar workshops during their own training program.

Component C. Upgrading the Physical Environment for Teaching and Learning (US$81 Million)

3.23 This component includes three components and seeks to reduce serious overcrowding and lack of student places. The school map prepared for the construction and expansion of primary

[11] Reading problems are identified between standard 1-3, mainly in "educationally at risk" schools (i.e., schools where more than 60% of standard 5 students did not make the minimum desirable marks).

schools under the project targeted fast growing neighborhoods and disadvantaged communities. See Annex J for recurrent cost implications (new teachers and maintenance) of this component.

Sub-Component C.1. School Construction and Reconstruction (US$48.23 Million)

3.24 At the primary level, a first subcomponent would finance the construction of 15 new schools to accommodate a total of 9,900 new students. The project will provide 38% of incremental demand expected up to the year 2,000. The program would target mainly large urban areas in and around Port-of-Spain and San Fernando and rural regions in eastern Trinidad and in Tobago. All the schools to be built would be located in low income communities.

3.25 The reconstruction of 15 dilapidated schools will benefit an additional 8,250 students (5% of present enrollment). By upgrading existing facilities, the project would guarantee the safety of primary school teachers and students and would provide a more conducive environment for teaching and learning. Required equipment and furniture would be provided. Annex C includes the schedule for construction and rehabilitation.

Sub - Component C.2. School Extension and Renovation (US$11.0 Million)

3.26 A second subcomponent would finance the extension and renovation of 16 schools, benefiting 6,145 students in existing buildings and 3,760 additional new students in extensions to existing schools. School extension and renovation will improve and optimize the use of the existing physical infrastructure and provide better working facilities for teachers, principals and students. Furthermore, the project would improve sanitation in all targeted schools by building bathrooms and providing access to running water. Required furniture and equipment would be provided.

Sub - Component C.3. Pilot Secondary School Construction (US$21.86 Million)

3.27 To lay the groundwork for access of primary school graduates to the secondary level in selected parts of the country, a third subcomponent would finance: (i) the development of a cost-effective design for secondary schools; (ii) the pilot construction of 3-4 secondary schools with a capacity of 800 students each; and (iii) the initial preparation and assessments needed for a follow-up project at the secondary level. This immediate investment is particularly important since the transition rates for the 1995-96 academic year showed a decline to 66% from the levels of 82% and 75% in 1982 and 1990, respectively. The proposed sites of the secondary schools are located in areas where the transition rate to the secondary level is even below the new national average. To minimize additional implementation burden on project staff, the MOE will contract a construction management firm to supervise the design and construction of the pilot schools. The pilot will be limited to only 3-4 schools while the Government generates substantive resources to expand access further and to address other subsector issues. Qualified teachers and instructional materials are available to guarantee an acceptable quality of education in the pilot schools.

Component D. Education Management and Institutional Strengthening (US$13.9 Million)

3.28 A first subcomponent would support the reform and decentralization goals of the MOE while improving the managerial, monitoring, planning and technical capacity of the MOE and its regional offices. A second subcomponent would provide resources to improve monitoring of nationwide student achievement, as well as increase the analysis and planning capacity of the MOE Division for Research and Evaluation (DRE). While improving central and regional services to the schools, a key third subcomponent would encourage and assist principals, teachers and parents to diagnose their own schools and plan quality and efficiency improvements. To this end, the project would finance approved SIPs.

Subcomponent D.1. MOE Reform and Decentralization (US$4.24 Million)

3.29 First, the subcomponent will finance the MOE reform and decentralization study and recommendations. The proposed analysis would include extensive involvement of MOE, regional and school staff. As a condition of effectiveness, the Government would have hired an experienced and qualified human resources and organizational development specialist to assist the MOE in the design and implementation of its decentralization and reform strategy and to head the Human Resources Management Unit (para. 7.2.b).

3.30 Second, the project will provide funds for viable action plans developed to implement the recommended reform and decentralization strategy. These decentralization plans will be prepared by five MOE divisions and by the eight regional education divisions. To implement approved plans, the project would allocate up to US$20,000 a year, for an aggregated total of US$100,000, for each of the following MOE divisions: School Supervision, Curriculum Development, Educational Services, Educational Planning, and the Human Resources Management Division. Up to US$50,000 a year, for an aggregated total of US$250,000, has been allocated for implementation of plans prepared by each of the eight regional divisions. Viable decentralization plans would receive funds for required technical assistance, training, furniture, equipment, and small physical renovations. Prior to disbursements for decentralization plans, the Government would provide evidence, acceptable to the Bank, that the decentralization analysis has been conducted, its recommendations are viable, and a master implementation schedule has been prepared (para. 7.3.a).

3.31 Technical assistance and training would assist in improving central and regional planning, management and team work skills. Short-term consultants would be hired to provide on-site technical assistance and training to the eight regional divisions. In addition, school supervisors and curriculum facilitators will be trained in areas such as educational management and planning, community participation, school-based management, and pedagogical assistance and supervision. The MOE-developed Decentralization and Institutional Development Manual specifies the guidelines for preparing and evaluating MOE divisional and regional action plans and the criteria for approval, in addition to other operational procedures. Subsequent to the decentralization study, the Manual will be adjusted to include any additional objectives to be accounted for in the development of the improvement plans. The adoption of the Decentralization and Institutional Development Manual is a condition of project effectiveness (para. 7.2.a).

3.32 Finally, the project will provide the required technical assistance, training, furniture and equipment for the establishment of a coordination unit to assist in administering, monitoring, evaluating and auditing the project. The staff from the project coordination unit would receive periodical training in project and financial management, procurement, disbursement and team building, as well as in facilitating stakeholders workshops.

Subcomponent D.2. Testing and Assessment Reform (US$1.16 Million)

3.33 The project would assist the MOE to collect timely, relevant, and diagnostic information on academic achievement of students in Standards 1, 3 and 5. In support of the above objective, the subcomponent would establish a computer-based test development and student tracking system. Results from Standards 1 and 3 tests would be disseminated to the regions and schools as an early diagnostic tool of student achievement and corrective support. Regional workshops would train teachers to use feedback from the new national achievement tests in developing corrective and support programs for students (see Annex D-2 for further details).

3.34 The MOE's Division for Research and Evaluation (DRE), assisted by external consultants, would prepare and implement a plan to improve the assessment and monitoring capacity of the education sector, including the introduction of the two additional national diagnostic tests at Standards 1 and 3. The project will finance technical assistance, training, equipment, furniture, and reference materials. Technical assistance and training workshops would strengthen the technical capabilities of the DRE in data base management, test design, item and exercise banking, statistical analysis and other assessment and monitoring skills. Salaries of additional DRE technical staff would be financed on a declining basis. The MOE has prepared a Testing and Assessment Services Manual.

Subcomponent D.3 School-Based Management Strengthening (US$8.5 Million)

3.35 The project would establish a seven-year School Based-Management Program (SBMP) to assist principals, teachers and parents to diagnose the needs of their own schools, design and implement SIPs.[12] Funds for implementation of SIPs would amount to an average of US$15,000 for each of 500 primary schools. Educationally at risk and low income schools will be provided with technical assistance to develop and implement their school subprojects. Proposed institutional reforms of the MOE and the regional districts would support increased leadership and autonomy at the school level. Financing of SIPs would provide a flexible and demand-based mechanism to allocate project resources (see Annex D-3 for further details). Prior to disbursements for SIPs, the plans would have been approved in conformity with the SBMP manual (para. 7.3.c).

3.36 Technical assistance would focus on the following activities: (i) regional and school-based team building workshops for regional staff, principals, teachers and community groups (e.g., PTAs, village councils and churches); (ii) small campaigns to promote community contributions; and (iii) needs assessments, development of SIPs and management of school sub-projects.

3.37 Targeting mechanisms have been defined for low performing and poor schools which may need more training and assistance in developing their SIPs. The project has classified schools as high, medium and low educationally at risk. The criteria for the different risk levels are based on attained educational performance and economic needs (see Annex D-3). The technical assistance to

[12] Improvement plans could consist of school-based projects such as: (i) developing teaching and learning materials; (ii) reinforcing teaching and learning of curriculum areas; (iii) creating school gardens; (iv) implementing teachers' workshops; (v) organizing community activities or sporting events; (vi) organizing school exhibitions and cultural activities; and (vii) improving the physical structure through small repairs, maintenance, and/or security activities.

be provided will focus on assisting all high risk schools (about 30% of total) in developing and implementing a SIP. The project will also finance SIPs of low risk schools to reward their efforts and provide early successes as motivation for medium and high risk schools. Additionally, low risk schools participating in the program would support weaker schools in developing and implementing their own SIPs. Schools unable to prepare and/or manage their own SIPs, even after training and provision of technical assistance, would still have their basic needs reflected in the overall supply of educational inputs provided by the project. The Bank reviewed the SBMP Manual, prepared by the MOE, which details the targeting and selection criteria of participating schools, the criteria for classifying schools by educational risk levels; the indicators of approval and success of SIPs; school improvement quality targets and indicators; and other operational procedures such as disbursement and procurement procedures. The adoption of the SBMP Manual is a condition of project effectiveness (para. 7.2.a).

4. PROJECT COSTS, FINANCING, PROCUREMENT AND DISBURSEMENT

A. Project Costs

4.1 The total project cost is estimated at US$121.7 million, including physical and price contingencies, US$18 million in local taxes, and US$29.7 million in incremental recurrent costs to be incurred during the life of the project. The total foreign exchange cost is estimated at US$31.3 million, including contingencies, or 26% of the base costs. Table 1 below summarizes the estimated costs by project component.

Table 1	(US$ million)			Foreign	Base
	Local	Foreign	Total	Exchange	Costs
A. Increasing ECCE Quality & Access					
Upgrading Quality	1.62	0.60	2.22	27	2
Increasing Access	4.48	0.76	5.24	14	5
Subtotal	6.10	1.36	7.46	18	7
B. Improving Educational Quality					
Classroom Instruction and Curriculum Strengthening	4.91	0.30	5.21	6	5
Textbooks and Instructional Materials	3.42	6.83	10.25	67	10
Subtotal	8.33	7.13	15.46	46	19
C. Upgrading the Physical Environment					
School Construction and Reconstruction	30.59	9.53	40.12	24	39
Upgrading Existing School Facilities	5.48	3.34	8.82	38	9
Secondary Schools Pilot	14.15	4.34	18.49	23	18
Subtotal	50.22	17.21	67.43	26	66
D. Education Management Strengthening					
Management Decentralization	3.53	0.26	3.79	7	4
Reform Sector--Monitoring and Evaluation System	0.61	0.41	1.02	40	1
School-Based Management Strengthening	7.53	-	7.53	-	7
Subtotal	11.67	0.67	12.34	6	12
Total BASELINE COSTS	76.32	26.37	102.69	26	100
Physical Contingencies	3.34	2.48	5.82	43	6
Price Contingencies	10.70	2.48	13.18	19	13
Total PROJECT COSTS (incld. taxes)	**90.36**	**31.33**	**121.69**	**26**	**119**

4.2 **Base Costs.** Base costs are expressed in June 1995 prices. Total contingencies of US$19 million represent 19% of base costs. Civil works costs are based on the two most recent construction projects, one of which was financed by the IDB. Estimated costs of school furniture are based on unit prices provided by the MOE and Ministry of Works and Transport and derived from current school furniture contracts. Equipment, office furniture, and educational materials are based on unit prices per item obtained from recent local and international purchases. Overseas and domestic training and cost of consultants (international and national experts) were based on current standards. Incremental recurrent costs such as salaries for new teachers and maintenance of buildings, furniture and equipment are based on current standards plus projected local inflation.

4.3 **Contingency Allowance.** Physical contingencies amount to 10% of base costs for civil works and goods for all components, including textbooks and instructional materials. For furniture, physical contingencies amount to 5% of base costs. No physical contingencies are considered for consultant services, funds for subprojects or recurrent costs. Price contingencies for foreign costs are based on a projected international inflation rate of 2.6% per year during the life of the project. Local cost price contingencies are based on a local projected inflation of 3.4% for 1996 and 2.9% for the following years during the life of the project.

4.4 **Duties and Taxes.** Locally procured goods are subject to a value-added tax (VAT) of 15%. Imported goods such as computers, audio-visual and office equipment can apply for duty free status. Salaries over US$500 a month are subject to an income tax rate of 33%. The estimated base cost of the project includes local taxes, which amount to approximately US$18 million.

B. Financing Plan

4.5 The proposed project would be financed by a Bank loan of US$51 million or 50% of total project cost net of duties and taxes. The loan would cover 100% of foreign exchange expenditures and 28% of the estimated total local costs net of taxes. The Government of the Republic of Trinidad and Tobago (GORTT) would finance the remaining US$52 million, which includes all incremental recurrent costs (see paras. 4.6-4.8) incurred by the project, and US$18 million in duties and taxes. GORTT counterpart funds for investment costs amount to approximately US$31 million during the life of the project, or an average of US$4.5 million a year. This figure represents 2% of the total 1995 Public Sector Investment Programme (PSIP) and 40% of the 1995 PSIP allocation to the education sector. The next section presents incremental recurrent costs and their impact on the MOE budget. Table 2 presents the estimated IBRD and Government disbursement plan. Table 3 gives the tentative project financing plan per component, including IBRD-Government cost sharing percentages, net of taxes. The Government provided assurances that yearly counterpart funds for the project would be allocated.

Table 2 Estimated IBRD-GORTT Disbursements (includ. taxes) (US$ Million)

	1996	1997	1998	1999	2000	2001	2002
IBRD	2.2	11.0	9.0	10.0	11.6	5.2	2.0
GORTT	3.8	8.0	11.0	13.0	13.4	11.8	10.0
Total	6.0	19.0	20.0	23.0	25.0	17.0	12.0
Cumulative	6.0	25.0	45.0	68.0	93.0	110.0	122.0

Table 2	The World Bank		GORTT		Total Net of Taxes		GORTT
	Amount	%	Amount	%	Amount	%	Taxes
A. Increasing ECCE Quality and Access							
Upgrading Quality	1.80	85	0.25	15	2.05	2	0.39
Increasing Access	1.95	52	3.70	48	5.65	5	0.44
Subtotal	3.75	62	3.95	38	7.70	7	0.83
B. Improving Educational Quality							
Classroom Instruction/Curriculum Strengthening	3.20	59	2.35	41	5.55	5	0.33
Textbooks and Instructional Materials	11.80	100	0.00		11.80	11	0.37
Subtotal	15.00	87	2.35	23	17.35	16	0.70
C. Upgrading the Physical Environment							
School Construction and Reconstruction	11.20	38	27.60	62	38.80	38	9.40
Upgrading Existing School Facilities	4.00	43	5.30	57	9.30	9	1.65
Secondary Schools Pilot	4.50	44	12.30	56	16.80	16	5.00
Subtotal	19.70	40	45.20	60	64.90	63	16.05
D. Education Management Strengthening							
Management Decentralization	3.60	90	0.40	10	4.00	4	0.24
Reform Monitoring and Evaluation System	0.75	89	0.20	11	0.95	1	0.18
School-Based Management Pilot	8.30	98	0.15	2	8.45	8	0.02
Subtotal	12.65	95	0.75	5	13.40	13	0.44
Total Disbursement	51.10	60	52.25	40	103.35	100	18.02

Note: Due to rounding, the numbers may not add up.

C. Recurrent Costs and Savings Arising from the Project

4.6 Incremental costs incurred from project investment include: (i) GORTT transfers and subsidies to local ECCE NGOs (mainly for salaries of new ECCE teachers); (ii) salaries of administrative staff of the newly established NCECCE; (iii) salaries of additional MOE and regional staff; (iv) salaries for new primary and secondary school teachers; and (v) preventive maintenance of facilities, furniture and equipment; and (vi) post-project replacement and repair of project financed textbooks and reading books. During the first three years of project implementation, the World Bank will assist in financing, on a declining basis, the incremental recurrent costs detailed in (i) through (iii) above. The cost of new salaries and preventive maintenance will represent direct increments to the MOE recurrent budget.

4.7 Over the project life, incremental recurrent costs generated by the project are estimated to grow from US$0.4 million in the first project year, to US$6.9 million in the last year. Based on the 1994 MOE budget of about US$198 million and projected budget increments of 3% per year during the 1996-2002 period, the impact of these costs on the MOE budget would be 0.2% in 1996, 0.26% in 1997, 0.94% in 1998, 1.8% in 1999, 2.2% in the year 2000, 2.4% in 2001, and 2.7% in 2002. After project completion, 2003-2009, a yearly average of recurrent costs generated by the project are estimated at US$8 million. This figure would amount to about 3% of the projected MOE budget.

4.8 Additional resources for education, to sustain project investments, can be expected with renewed economic growth[13] and the traditional stability of public spending on education as percentage of GDP. Project-generated recurrent costs remain small and would be easily incorporated into the MOE budget. See Annex J for detailed recurrent cost calculations, including a no-growth scenario and a worse case scenario.

[13] In 1994, GDP growth reached 4% for the first time since the economic decline of the mid-1980s. It is estimated that the economy would grow between 2 to 3 percent per annum in the medium term and to 4 to 5 percent by the end of the decade.

4.9 In addition to the assessed, long-term positive effects that a quality education and increased learning have in the employment and earnings of basic education graduates, the project would generate some savings and economic benefits by the end of the project. First, a sustainable school-based staff development strategy would target about 40% of teachers (10 per school) each year. The in-school training would cost an average of US$400 per school or US200,000 annually. For the same number of teachers, centralized workshops would cost around US$1 million if lost teaching days, consultants and incidentals are aggregated. Second, the project expects to reduce by 20% the number of Standard 5 students not attaining the minimum desirable marks in the CEE and who lack a secondary school place. A current 15% repetition rate in Standard 5 costs the Government, each year, around US$1.2 million in additional per student expenditures which could be used to improve the quality of education in Standard 5 classes (e.g., by reducing class size and increasing per-student expenditure).[14] Finally, the project's educational interventions are those which education research has assessed as having the highest returns (student learning) on investment (cost of inputs).[15]

Table 4
Incremental Recurrent Costs to be Incurred by the Project
(US$ '000)

	Base Cost						
	1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**
I. Incremental Recurrent Costs							
A. Recurrent Cost IBRD-Financed on a Declining Basis							
1. Increased Transfers to ECCE NGOs	84.00	172.20	260.40	394.80	529.20	663.60	709.80
2. NCECCE Administration	90.00	90.00	90.00	90.00	90.00	90.00	90.00
3. Regional Staff	96.00	96.00	96.00	96.00	96.00	96.00	96.00
4. MOE Staff	62.90	62.90	62.90	62.90	62.90	62.90	62.90
5. Project Coordination Unit	67.36	118.80	118.80	118.80	118.80	118.80	118.80
Subtotal IBRD-Financed	400.26	539.90	628.10	762.50	896.90	1,031.30	1,077.50
B. Non-IBRD Financed Incremental Recurrent Costs							
1. Incremental Primary School Teacher Salaries	-	-	730.40	1,387.80	2,191.30	2,812.20	3,652.20
2. Incremental Secondary School Teacher Salaries	-	-	668.10	1,909.00	1,909.00	1,909.00	1,909.00
4. Preventive Maintenance - Primary Schools							
Primary School Facilities	-	-	32.50	61.70	97.40	125.00	162.30
Equipment	6.10	10.80	15.20	17.10	19.00	19.00	19.00
Furniture	2.70	11.00	20.10	29.30	37.90	44.30	45.70
Subtotal -- Primary Schools	8.80	21.80	67.80	108.10	154.30	188.30	227.00
5. Preventive Maintenance -- Secondary Schools	-	-	14.00	40.00	40.00	40.00	40.00
Subtotal Non-IBRD Financed	8.80	21.80	1,480.30	3,444.90	4,294.60	4,949.50	5,828.20
Total Incremental Recurrent Costs	**409.06**	**561.70**	**2,108.40**	**4,207.40**	**5,191.50**	**5,980.80**	**6,905.70**

D. Project Sustainability

4.10 The effect of the proposed project on total educational expenditures and the ability of the GORTT to finance and sustain the resulting increase in recurrent costs was carefully discussed with the Government during appraisal. Budget line items that may need adjustments would be monitored during project implementation to ensure inclusion of funds to the MOE budget to cover project generated recurrent costs (para. 7.1.d).

[14] This amount is calculated based on an annual public cost per student of US$340 in 1993. Private households' costs are not counted.

[15] World Bank, 1995; Lockheed and Verspoor, 1991; Harbison and Hanushek, 1992; Postlethwaite and Ross, 1989; Warwick and Reimers; Tatoo, et.al. 1989; Fuller and Clarke, 1994).

5. IMPLEMENTATION, PROCUREMENT, DISBURSEMENT, AUDITING, MONITORING AND SUPERVISION

A. Status of Preparation

5.1 Project preparation was supported by a US$ 200,000 Japanese Fund Grant, which financed the ECCE and the textbooks and instructional material surveys, as well as short-term support from international and national experts to assist the MOE in the design of the project. Project implementation readiness was well advanced at the time of appraisal, due to the early establishment and operations of the project coordination unit.

5.2 Preparation of the civil works program included completion of: (i) a detailed terms of reference for the design of new primary schools, including general planning and design considerations, standard of performance, and scope of services; (ii) the prequalification of teams of architects and engineers to propose designs of preliminary schools; and (iii) a general costing and implementation schedule based on the two most recent civil works project, one of which was financed by IDB. All construction sites have been selected and cadastral and topographical surveys have been completed for 90% of total sites.

5.3 The MOE conducted a detailed project implementation planning. Prior to appraisal, the MOE had prepared a draft of its implementation plan for the project and includes: (i) time bound targets and activities for each subcomponent; (ii) a preliminary schedule of procurement actions; and (iii) key indicators for monitoring implementation progress and for impact evaluation. The MOE and the PCU drafted the operational manuals for each major implementation activity (ECCE, teacher training, instructional materials, civil works, testing and assessment, decentralization and SBMP), which detail specific implementation procedures, standard terms of reference and draft contracts, as well as schedules and budgets. The Bank has reviewed the project implementation plan and the preliminary drafts of the operational manuals, in addition to the structure, functions, staffing and initial operations of the EPCU. The adoption of the Project Implementation Manual is a condition of project effectiveness (para. 7.2.a).

5.4 Project activities to be undertaken in advance of loan signing would be financed from an approved PPF and retroactive financing. The GORTT has opened the respective line items in the MOE budget for allocation of IBRD funds and has made initial GORTT counterpart funds available.

B. Implementation Schedule

5.5 The project is expected to be implemented over a 7-year period from January 1st, 1996 to December 31, 2002. The loan closing date is June 30, 2003. The MOE prepared the implementation plan for the project including: (i) time bound targets and activities for each subcomponent, (ii) a preliminary schedule of procurement actions; (iii) costs and disbursement schedules; (iv) key indicators for monitoring implementation progress; and (v) a detail implementation schedule for the first year of operations.

C. Project Management

5.6 Project implementation will be carried out within the existing organizational structure of the MOE supported by a Project Coordination Unit (PCU) of mostly MOE staff. This arrangement will guarantee MOE ownership of the project as it remains an integral part of its portfolio of services. Other education stakeholders -- to include the NTFE, the ECCE National Council (NCECCE), local NGOs, parent-teacher associations, communities, and schools --would participate in the implementation of the project, which will increase project impact and reduce direct management responsibilities of the MOE. The MOE appointed a PCU coordinator; established an Inter-Divisional Project Management Team; and formed various project planning committees with representation from important stakeholders. The PCU coordinator will report to the Permanent Secretary and will collaborate with the Inter-Divisional Team and planning committees to consolidate annual work plans, coordinate activities among participating agencies, provide administrative backup services, carry out project monitoring and evaluation, and provide this information annually for Bank reviews. To support the financial and procurement management functions of the PCU, a Unit Administrator with extensive private sector, financial and management experience would be hired on a full-time basis to assist the MOE-appointed coordinator and to transfer additional management skills. A construction supervision firm will be contracted as well to minimize the additional burden on project staff of implementing the primary school construction program and the secondary school construction pilot. During project implementation, the MOE and the Bank would monitor the performance of the PCU and its implementation and coordination capacity. Contracting a qualified and experienced administrator and a private architectural firm to supervise the construction program is a condition of project effectiveness (para. 7.2.c).

D. Procurement

5.7 Bank procurement guidelines will be followed for the proposed project. The project would procure: (i) civil works; (ii) goods including instructional materials, equipment and furniture; (iii) consultant services including technical assistance, training, promotion, auditing and supervision; and (iv) recurrent costs. In addition, the project would provide grants for implementation of improvement sub-projects to be prepared by schools and their communities (see Annex H, p. 96.). Table 3 below summarizes recommended procurement methods, major procurement accounts and aggregated total amounts, including contingencies and local taxes. Prior to the first invitation to bid for contracts under the project, the Government will furnish to the Bank for its review and approval, the proposed procurement plan for the project (para. 7.4).

5.8 **Civil Works**. Works comprise: (i) construction of primary and secondary school facilities amounting to US$37 million; (ii) large scale refurbishment valued up to US$10 million; and (iii) small construction of preschool centers and other small refurbishments for a total of about US$3 million.

5.9 Construction of primary and secondary schools will be procured through international competitive bidding (ICB) procedures. Eight new construction packages have been prepared by region and in average contracts of US$4-5 million. National Competitive Bidding (NCB) procedures may be used for civil work contracts between US$250,000 and US$3 million, up to an aggregate amount of US$10 million. NCB would be used mostly for school renovations and extensions, and to the extent practicable these works would be grouped in packages over US$250,000. The cost per school for renovations and extensions ranges from US$48,200 to US$749,300.

5.10 Minor works estimated to cost less than US$250,000, up to an aggregate amount of US$3 million, will be procured under lumpsum, fixed price contracts awarded on the basis of quotations obtained from three qualified contractors in response to a written invitation. Planned minor works include construction of new ECCE centers. The cost of new construction per center is estimated at US$35,000.

5.11 **Goods.** Procurement of goods -- including computer software and hardware, textbooks, reading books, non-written instructional materials, furniture, audio-visual and office equipment -- will be procured in accordance with Bank guidelines and using standard bidding documents to be agreed with the Bank.

5.12 *Computer Equipment.* Computer hardware and software would be procured through limited international bidding (LIB) in 6-7 packages estimated to cost more than US$250,000 equivalent per contract and US$2 million in the aggregate. All major international computer suppliers are represented in Trinidad and Tobago and will be invited to bid.

5.13 *Textbooks and Reading Books.* Procurement of textbooks valued at US$7.1 million would be awarded on the basis of two-step ICB procedures, in accordance with Bank guidelines for all contracts valued above US$250,000. Reading books, mostly from Caribbean authors, estimated to cost more than US$50,000 but less than US$250,000 per contract and US$1.5 million or less in the aggregate, would be procured through national competitive bidding (NCB) procedures.

5.14 All other goods estimated to cost less than US$35,000 per contract, up to an aggregate amount of US$2.75 million, may be procured under contracts awarded through national or international shopping according to Bank guidelines; goods estimated to cost less than US$50,000 per contract, up to an aggregate amount of US$1.25 million, may be procured under contracts awarded through international shopping.

5.15 **Consultant Services.** Consultant services, including national and international experts to provide technical assistance and training, will be procured under contracts awarded in accordance with the provisions of the *Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency* published by the Bank in August 1981. Total cost of consultant services (excluding consultants for design and supervision of civil works, which will be financed 100% by government counterpart funds) has been estimated at US$5.7 million.

5.16 **Subprojects (Community Participation).** The project would provide grants for subprojects -- SIPs and ECCE proposals for small refurbishment, instructional materials and other goods -- prepared by schools and communities. Given the small size of these contracts and the wide range in types and timing of individual subprojects, packaging large groups of subprojects for procurement purposes would be unlikely. The cost of each individual subproject will not exceed US$7,000 per SIP and US$7.5 million in the aggregate, and US$15,000 per ECCE proposal and US$1.5 million in the aggregate. Contracts for minor works and goods would be awarded on the basis of lump sum, fixed price contracts through quotations obtained from at least three eligible suppliers. In rural areas, when price quotations cannot be obtained, direct contracting may be used for up to US$ 1.5 million for SIPs and US$300,000 for ECCE proposals (20% of aggregated amount). Any consultant services needed for SIPs would be contracted under the Bank Guidelines for the Use of Consultants detailed in para. 3.14 above. The operational manual for the SBMP will indicate standard terms of reference and scale of fees for use of consultants.

Table 5

	ICB	NCB	Other/a	N.B.F./d	Total
	Procurement Method				
A. CIVIL WORKS					
1. New Construction	37,000.0	-		-	37,000.0
	(15,000.0)				(15,000.0)
2. Renovations and Extensions	-	10,000.0		-	10,000.0
		(4,000.0)			(4,000.0)
3. Small Works			3,000.0		3,000.0
			(1,700.0)		(1,700.0)
4. Design and Supervision	-	-	-	5,500.0	5,500.0
B. GOODS					
1. Textbooks and Reading Books/b	7,100.0	1,500.0			8,600.0
	(7,100.0)	(1,500.0)			(8,600.0)
2. Computer Hardware and SoftWare /c	-	-	2,000.0	-	2,000.0
			(1,700.0)		(1,700.0)
3. Classroom Furniture (primary/sec. schools)	-	-		4,500.0	4,500.0
4. Other/e			4,000.0		4,000.0
			(4,000.0)		(4,000.0)
C. CONSULTANT SERVICES			5,700.0		5,700.0
	-	-	(5,700.0)	-	(5,700.0)
D. MISCELLANEOUS					
1. Subprojects (community Participation)					
School Improvement Plans			7,500.0		7,500.0
			(7,500.0)		(7,500.0)
ECCE Proposal	-	-	1,500.0	-	1,500.0
			(1,400.0)		(1,400.0)
2. Training Grants /f	-	-	-	2,250.0	2,250.0
3. Recurrent Costs	-	-	6,123.0	-	6,123.0
			(1,400.0)		(1,400.0)
4. Non-IBRD Financed Recurrent Costs				23,577.0	23,577.0
Total	44,100.0	11,500.0	29,823.0	35,827.0	121,250.0
	(22,100.0)	(5,500.0)	(23,400.0)	-	(51,000.0)

Note: Figures in parenthesis are the respective amounts financed by The World Bank

\a Others include Limited International Bidding, Shopping, Direct Contracting (in rural areas for subprojects with community participation) and consultant services

\b Textbooks would be awarded on the basis of two-step ICB procedures. Reading Books would be mainly from local and Caribbean authors and would be awarded through NCB procedures.

\c LIB among major international computer suppliers who have services facilities in Trinidad and Tobago

\d *Non-Bank Financing, 100% Counterpart funds*

\e Includes non-written instructional materiasl, audio-visual equipment, and office equipment and furniture.

\f *Training Grants are for expenses associated with mainly resource and substitute teachers.*

5.17 **Bidding Documents.** MOE would use Standard Bidding Documents (SBD) issued by the Bank for the procurement of goods and services under ICB and LIB, and Bank-issued standard forms of contract and model letters of invitation (LOI) for hiring consultants during project implementation. The Bank and the Government agreed on the standard bidding documents to be used in all procurement financed by the Bank under the project (para. 7.1.e).

5.18 **Bank Review Requirements**. The Bank will review and approve before contract award all documentation for: (i) ICB and LIB procurement, (ii) the first NCB contract for civil works and for goods each year, and (iii) consulting services contracts for amounts over US$50,000 for firms and

US$5,000 for individuals.[16] Prior Bank review for consultant services will also apply to: (i) single source contracts for firms; (ii) assignments of a critical nature as reasonably determined by the Bank; and (iii) amendments to contracts raising the contract value over the Bank review limits. For all other contracts, documentation (invitation to bidders, advertisements, bidding documents, prequalification reports, drawing specifications, terms of reference, evaluation reports and contract awards) will be randomly reviewed ex-post during Bank supervision missions. Given the nature of the project, the Bank would conduct a prior review of about 50% of contracts during the project's life.

5.19 It is the Government's responsibility to ensure adherence to procurement guidelines, competitive prices, quality and delivery capacity. All appropriate documentation should be kept in file by the MOE and its PCU. The Bank will not finance expenditures for goods and services which have not been procured in accordance with the agreed procedures. In such cases, the Bank may cancel, or collect an equal amount to, the portion of the loan allocated to misprocured goods and services.

E. Disbursements

5.20 The project's completion date would be December 31st, 2002, and the closing date would be June 30, 2003. Proceeds of the proposed loan would be disbursed during a 7-year period, according to implementation schedules for each component. The proposed schedule was agreed upon between the Government and the Bank at negotiations. The proceeds would be disbursed against expenditures that would be submitted to the Bank fully documented for contracts valued at more than US$3 million equivalent for works, US$250,000 for goods and at US$50,000 for consultant services from firms and US$5,000 for individuals, in addition to the first contract over US$250,000 for works and US$50,000 for goods every year. Claims for expenditures of lesser amounts would be disbursed against presentation of Statements of Expenditure (SOEs) by the PCU, for which the supporting documentation would be retained by MOE for inspection by the Bank and external auditors. Training and salaries would also be disbursed under SOE procedures.

5.21 Table 6 below summarizes the disbursement percentages established for the project. Duties and taxes are not financed. Disbursement will be made against 90% of ECCE, decentralization and school subprojects; 50% of expenditures on civil works; and 100% of consultant services. Disbursements percentages for goods will be 100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 90% of local expenditures. Disbursement percentages for recurrent costs, on a declining basis, would begin with 100%, up to an aggregate amount of US$400,000, 80% thereafter, up to an aggregate amount of US$600,000, and 40% thereafter. It is estimated that by the fourth year of the project, the Government will be able to incorporate all permanent recurrent costs incurred by the project into the regular (non-project) MOE budget.

[16] Most consultant services will be procured from firms and NGOs.

Table 6

Disbursement Category	Amount of the Loan Allocated (US$ million)	Percent of Expenditures to be Financed
1. Subprojects (Goods and Works)		
(a) ECCE Proposals	1.4	90%
(b) Decentralization Action Plans	2.0	90%
(b) School Improvement Plans	7.5	90%
1. Works	18.7	50%
2. Goods	11.0	100% of foreign expenditures, 100 of local expenditures (ex-factory cost) and 90% of local expenditures
3. Consultant Services and Training	5.7	100%
5. Salaries and Operating Costs	1.4	100% up to US$0.4; 80% thereafter up to US$0.6; and 40% thereafter.
6. Refunding of PPF	0.3	
5. Unallocated	3.0	
TOTAL	51.0	

5.22 A project preparation facility (PPF) in the amount of US$300,000 was advanced from the loan to assist the Government in the preparation of the project and in establishing the PCU. To support the early implementation of key activities, retroactive financing for the project for up to US$500,000 equivalent would be made for eligible project expenditures incurred after June 1, 1995.

5.23 A Special Account (SA) in U.S. dollars has been set up in the Central Bank. After project effectiveness, an initial deposit of US$750,000 will be made, corresponding to about four months of initial project expenditures. SA funds will be available for financing only the Bank's share of eligible project costs. The Bank will replenish the Special Account as requested upon receipt of satisfactory evidence that expenditures paid were eligible for financing out of the account. Replenishment requests, accompanied by the corresponding SOEs and/or full documentation, will be sent to the Bank at agreed intervals.

F. Accounts and Audits

5.24 All expenditures incurred by the project would be subject to the normal Government accounting and auditing procedures, with the added requirements that the PCU, other project executing agencies, and recipients of funds would establish and maintain separate accounts and an accounting and filing system acceptable to the Bank. The PCU would maintain consolidated accounts of all expenditures under the project, and would prepare periodically interim (unaudited) financial reports and information on SOEs, SA and subprojects' transactions. These accounts, financial statements and interim financial reports would be audited annually by independent auditors satisfactory to the Bank. The audit reports -- which would include separate opinions on the adequacy of SOEs, financial statements, and transactions under SA and subprojects -- would be forwarded to the Bank no later that six months after the end of each fiscal year. The Government has provided assurances that all project accounts will be audited annually in accordance with appropriate auditing principles by independent auditors acceptable to the Bank. The adoption of an accounting, filing and financial monitoring system is a condition of project effectiveness (para. 7.2.d).

G. Project Monitoring, Evaluation and Supervision

5.25 Progress toward the achievement of project impact, outputs and processes would be monitored in four ways against a defined set of indicators (Annex G -- Monitoring and Evaluation). First, a project monitoring system would track progress toward achieving expected outputs in civil works, training, provision of instructional materials, improvement plans and other key activities through four key types of indicators: (i) number of beneficiaries/amount of goods and services provided; (ii) beneficiary satisfaction; (iii) comparison of budgeted amount to actual expenditures; and (iv) planned to actual time of required internal processes and delivery. Second, implementation summaries, financial reports and supervision missions will review the effectiveness and efficiency of financial, administrative and institutional processes of all executing agencies for the project. Third, the PCU, regional MOE staff and schools principals periodically will track impact indicators on school effectiveness which would measure changes in classroom processes, school-community cooperation and student achievement. Fourth, as part of the midterm evaluation, the Government and the Bank will evaluate the impact of the project on the operation of ECCE centers and the availability and use of instructional materials in primary schools in comparison to the baseline data provided by the two studies conducted during project preparation. In addition, the midterm evaluation will conduct a comprehensive review of the impact indicators' results on school effectiveness conducted annually by the PCU and regional and school staff. The Bank and the Government have agreed on the list of monitoring and evaluation indicators for financial and operational progress, as well as for tracking improvements in school effectiveness (para. 7.1.f).

5.26 During supervision missions, the Bank will: (i) review financial, operational and impact progress summaries prepared by the PCU prior to each supervision mission; (ii) monitor and review randomly selected expenditures and contracts without prior Bank review; (iii) conduct stakeholders workshop with representatives of school, regional and MOE staff, in addition to other community, government and NGO agencies participating in the project; and (iv) review with the MOE any required implementation adjustments or outstanding issues, which would be reflected in the project implementation manual. Twenty-three staff weeks have been allocated for supervision missions during the first year of the project, and an average of fourteen staff weeks annually thereafter. To assist in Bank supervision of the civil works program, an architect/engineer would be a member of Bank missions as needed and would support in reviewing procurement documents for no objections. During project launch, the Bank will conduct a procurement and disbursement seminar for project staff.

5.27 Once a year, MOE and the Bank would conduct joint project implementation reviews to: (i) analyze the previous year's financial and operational performance and achievement of desired impact; (ii) analyze and agree on the proposed work plan and budget for the following year and any adjustment to the overall project schedule; (iii) discuss and agree on any revisions to the project implementation manual, including the ECCE, school-based management, and decentralization and institutional strengthening programs; and (iv) discuss the long term sustainability of the project investments. The agreed supervision work plan includes progress reports, Bank missions, annual project reviews and a midterm evaluation, as well as the strategy to adjust project processes, timetables and budgets. In addition, the Government provided assurances that the MOE would conduct, with prior approval of the terms of reference by the Bank and no later than 42 months after loan effectiveness, a midterm review to analyze project implementation experience and project impact (para. 7.2.g).

6. EXPECTED BENEFITS AND RISKS

A. Benefits

6.1 The expected benefits of the project are: (i) enhanced cognitive and social development of children in ECCE to enter primary education; (ii) improved quality of teaching (instruction, assessment and curriculum) and learning (academic achievement) in primary education; (iii) improved physical facilities for ECCE and primary and secondary education; and (iv) enhanced efficiency of delivery and use of educational goods and services by regional, school and community beneficiaries.

6.2 Quantifiable benefits include: (i) increased access to pre-school and developmental child care for an estimated 2,225 poor 3-4 year-old children (20% of lowest income quintile), (ii) enhanced pedagogical capacity of some 350 existing ECCE teachers and 300 new teachers; (iii) improved quality of instruction in 480 public and Government-assisted primary schools; (iv) provided and properly used textbooks for an estimated 75,000 poor 5-11+ year old children (35% of primary school enrollment); (v) available supplemental reading books and instructional materials in 500 primary schools to support, *inter alia*, the teaching of math, science and aesthetics (arts and craft, music and drama); (vi) an established regional training-of-trainers program (ECCE and primary level) for school supervisors, curriculum facilitators, principals and specialized teachers; (vii) a sustainable in school-based staff development program in 500 primary schools; (viii) a viable nation-wide student achievement assessment system for children in Standard 1, 3 and 5; (ix) 15 rebuilt primary schools benefiting 8,250 students, 16 extended and renovated schools benefiting 6,145 students in existing buildings and 3,760 additional students, and 15 new primary schools to accommodate 9,900 new students (40% of incremental demand by the year 2,000); (x) increased access to secondary school for 3200 students; (xi) improved quality and efficiency of the 8 regional districts and MOE services to the schools; and (xii) improved school control over decision making and resources by direct financing of up to 500 SIPs.

B. Risks

6.3 The major risks to project implementation are: (i) limited MOE experience with project management and interaction with its regional offices, local communities and schools, which could prevent consolidation of efforts by all stakeholders; (ii) limited MOE autonomy to expedite procurement and disbursement that could delay project progress and jeopardize effective implementation; and (iii) schools most in need may not have the quality of management and appropriate support to absorb effectively project inputs. During project preparation the above-mentioned risks were identified and efforts were made to help reduce their impact. The permanent appointment of project-experienced senior staff strengthened overall MOE management. Close collaboration of executing agencies (MOE, regional districts, NGOs, UWI) and stakeholders during project preparation improved institutional and professional linkages among actors in the education sector. To strengthen project implementation capacity, the MOE established the PCU early and provided training for its staff. Finally, a Cabinet resolution increased the autonomy of line ministries to expedite procurement and disbursement procedures. During project implementation, absorptive and implementation capacity will be increased by: (i) technical assistance from short-term consultants and NGOs at the central, regional and, especially, at the school level; and (ii) encouragement of community participation through regular stakeholder workshops, information campaigns and direct financing of viable regional, community and school subprojects. Project financial management, procurement, and distribution capacity will be strengthened further by: (i) hiring a unit administrator with proven private sector financial and administrative experience and a senior architect/civil engineer to support the MOE-appointed coordinator and professional staff; (ii) contracting private sector firms and NGOs to assist in planning, supervising and implementing the civil works program; and (iii) decentralizing procurement in subcomponents with NGO-community participation. The monitoring and evaluation system will benefit from the permanent technical advice of NTFE members and other stakeholders in the sector to assist in evaluating and adjusting project inputs, timing and/or strategy. Nonetheless, it must be recognized that not all risks inherent in change management projects can be completely controlled. Improved efficiency, team work and communication between schools, regional districts and MOE divisions require a clear shift in the organizational culture of all the institutions and individuals involved. The monitoring system and the mid-term evaluation would help identify early any potential problems in inter-agency communication and collaboration.

C. Poverty Category

6.4 The project is part of the poverty program of targeted interventions. The project includes specific mechanisms to target project inputs for the educational needs of children of the lowest income groups of the population. The approval guidelines for ECCE community proposals, textbook subsidies and SIPs include criteria based on financial need (See Annex A-1, B-2 and D-3). Primary schools participating in the project have been categorized -- based on both academic achievement and the percentage of their student population needing financial assistance -- as high, medium and low educationally at risk. The project will use this categorization to allocate resources and to monitor project impact.

D. Environmental Impact

6.5 Environmental Rating: C. The project does not present environmental risks other than the relatively minor ones associated with school construction and maintenance activities. These will be addressed in the design and approval stage of investment subprojects. Moreover, the project would help improve the environmental status of school facilities by requiring that school renovations and constructions make adequate provision for water, sanitation, drainage, etc.

7. AGREEMENTS REACHED AND RECOMMENDATION

7.1 During negotiations, the Government provided assurances that:

a) the GORTT has issued new guidelines providing greater autonomy to line ministries (including MOE) in personnel and financial management; (para. 2.5)
b) a Cabinet decision has formally established the ECCE program within the MOE (para. 3.3);
c) the MOE has established targeting and distribution mechanisms and administrative procedures to target low income and educationally at risk schools (paras. 3-18 and 3.37);

d) the MOF has issued a letter confirming the Government's commitment to the allocation of adequate financial resources in the annual budgets to meet the investment counterpart requirements and recurrent costs of the Project (paras. 4.5 and 4.10);
e) the MOE will adopt a project procurement plan and the standard bidding documents for the procurement of civil works, goods and services (para. 5.17);
f) the MOE will track monitoring and evaluation indicators for financial and operational progress, as well as impact at the school level, and will implement a strategy to adjust project processes, timetables and budgets as needed (para. 5.25); and
g) the MOE will support a supervision work plan including progress reports, Bank missions, annual project reviews and a midterm evaluation (para. 5.27).

7.2 As conditions of effectiveness, the MOE would provide evidence acceptable to the Bank that:

a) it has adopted the Project Implementation Manual including the related Operational Manuals for the ECCE, Decentralization, and the School-Based Management Programs (para. 3.3, 3.31, 3.37 and 5.3);
b) it has hired an experienced and qualified human resources and organizational development specialist to assist the MOE in the design and implementation of its decentralization and reform strategy (para. 3.29);
c) it has hired a qualified and experienced Unit Administrator and a construction management firm (para. 5.7); and
d) it has adopted an accounting, filing and financial monitoring system (para. 5.24).

7.3 Prior to disbursements:

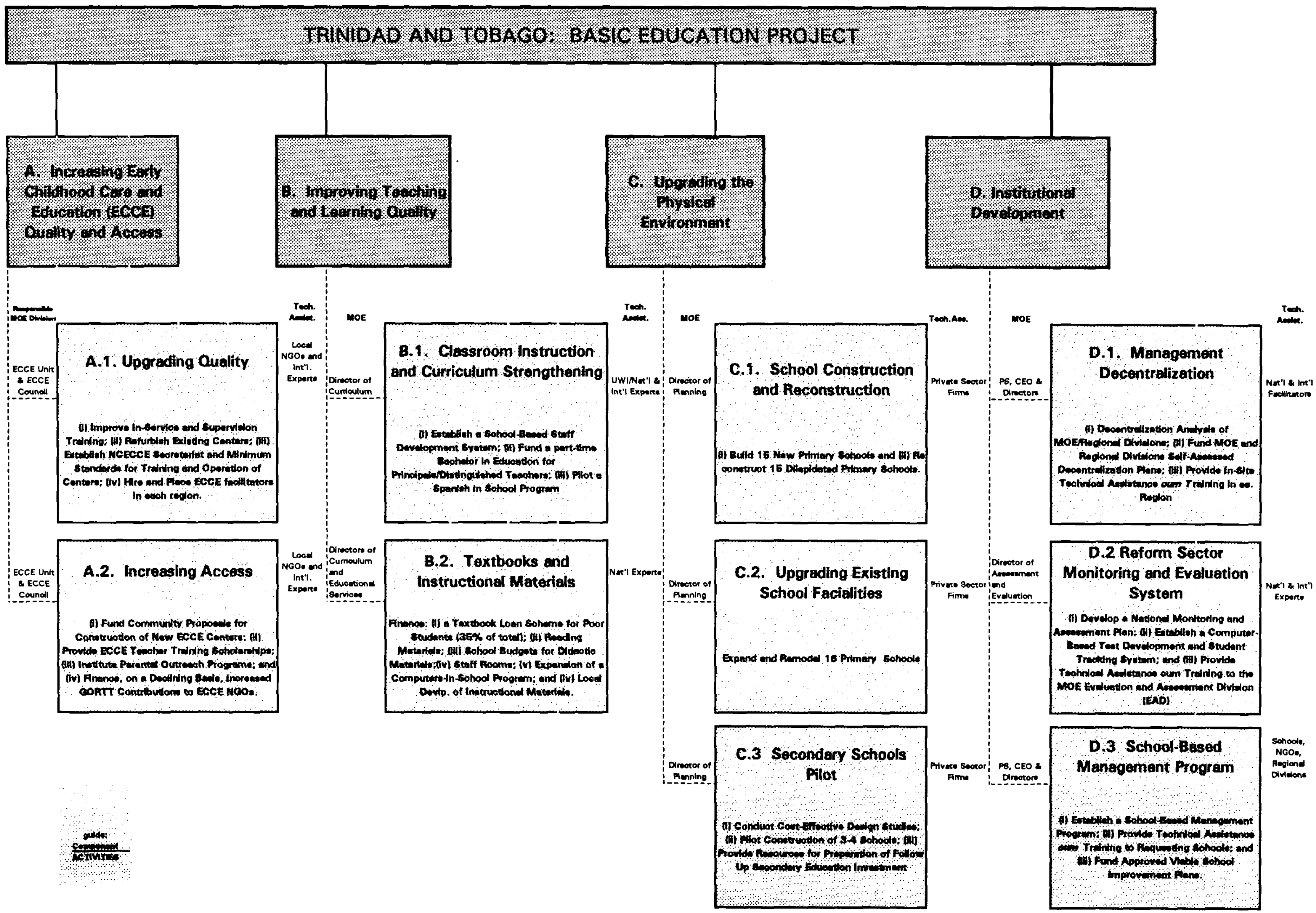
a) for MOE decentralization plans to be prepared by the MOE central and regional divisions, the MOE would provide evidence acceptable to the Bank that the decentralization analysis has been conducted; its recommendations are viable; and a master implementation schedule has been prepared (para. 3.30);
b) for community proposals for ECCE and parental outreach activities, the proposals would have been approved in conformity with the ECCE Operational Manual (para. 3.3); and
c) for SIPs, the plans would have been approved in conformity with the SBMP manual (para. 3.35).

7.4 Prior to the issuance of any invitations to bid for contracts, the proposed procurement plan for the project will be furnished to the Bank for its review and approval (para. 5.7).

7.5 With the above conditions and assurances, the project constitutes a suitable basis for a Bank loan of US$51 million equivalent to the Republic of Trinidad and Tobago for a period of 15 years, including five years of grace, at the Bank's standard variable interest rate.

ATTACHMENTS

FIGURE 1:	**Matrix of Project Components, Sub-Components and Major Activities**
ANNEX A:	**Early Childhood Care and Education**
A-1:	Upgrading ECCE Quality
A-2:	Increasing ECCE Quality
ANNEX B:	**Improving Primary Schools' Teaching and Leaning Quality**
B-1:	Classroom Instruction and Curriculum Strengthening
B-2:	Textbooks and Instructional Materials
ANNEX C:	**Upgrading the Physical Environment**
ANNEX D:	**Education Management Strengthening**
D-1:	Management Decentralization
D-2:	Monitoring and Evaluation Reform
D-3:	School-Based Management
ANNEX E:	**Project Management**
ANNEX F:	**Implementation and Supervision Plan**
ANNEX G:	**Monitoring and Evaluation**
ANNEX H:	**Procurement and Disbursements**
ANNEX I:	**Beneficiaries' Assessment and Participation**
ANNEX J:	**Education Sector Financing, Expenditure Choice Criteria, and Project Recurrent Cost Implications**
ANNEX K:	**Education Statistics**
ANNEX L:	**Selected Documents and Data Available in Project Files**



TRINIDAD AND TOBAGO: BASIC EDUCATION PROJECT
A. Increasing Early Childhood Care and Education (ECCE) Quality and Access
B. Improving Teaching and Learning Quality
C. Upgrading the Physical Environment
D. Institutional Development
Responsible MOE Division
Tech. Assist.
MOE
Tech. Ass.
ECCE Unit & ECCE Council
A.1. Upgrading Quality
(i) Improve In-Service and Supervision Training; (ii) Refurbish Existing Centers; (iii) Establish NCECCE Secretariat and Minimum Standards for Training and Operation of Centers; (iv) Hire and Place ECCE facilitators in each region.
Local NGOs and Int'l. Experts
Director of Curriculum
B.1. Classroom Instruction and Curriculum Strengthening
(i) Establish a School-Based Staff Development System; (ii) Fund a part-time Bachelor in Education for Principals/Distinguished Teachers; (iii) Pilot a Spanish in School Program
UWI/Nat'l & Int'l Experts
Director of Planning
C.1. School Construction and Reconstruction
(i) Build 15 New Primary Schools and (ii) Reconstruct 15 Dilapidated Primary Schools.
Private Sector Firms
PS, CEO & Directors
D.1. Management Decentralization
(i) Decentralization Analysis of MOE/Regional Divisions; (ii) Fund MOE and Regional Divisions Self-Assessed Decentralization Plans; (iii) Provide In-Site Technical Assistance cum Training in ea. Region
Nat'l & Int'l Facilitators
ECCE Unit & ECCE Council
A.2. Increasing Access
(i) Fund Community Proposals for Construction of New ECCE Centers; (ii) Provide ECCE Teacher Training Scholarships; (iii) Institute Parental Outreach Programs; and (iv) Finance, on a Declining Basis, Increased GORTT Contributions to ECCE NGOs.
Local NGOs and Int'l. Experts
Directors of Curriculum and Educational Services
B.2. Textbooks and Instructional Materials
Finance: (i) a Textbook Loan Scheme for Poor Students (35% of total); (ii) Reading Materials; (iii) School Budgets for Didactic Materials;(iv) Staff Rooms; (v) Expansion of a Computers-in-School Program; and (iv) Local Devlp. of Instructional Materials.
Nat'l Experts
Director of Planning
C.2. Upgrading Existing School Facilities
Expand and Remodel 16 Primary Schools
Private Sector Firms
Director of Assessment and Evaluation
D.2 Reform Sector Monitoring and Evaluation System
(i) Develop a National Monitoring and Assessment Plan; (ii) Establish a Computer-Based Test Development and Student Tracking System; and (iii) Provide Technical Assistance cum Training to the MOE Evaluation and Assessment Division (EAD)
Nat'l & Int'l Experts
Director of Planning
C.3 Secondary Schools Pilot
(i) Conduct Cost-Effective Design Studies; (ii) Pilot Construction of 3-4 Schools; (iii) Provide Resources for Preparation of Follow Up Secondary Education Investment
Private Sector Firms
PS, CEO & Directors
D.3 School-Based Management Program
(i) Establish a School-Based Management Program; (ii) Provide Technical Assistance cum Training to Requesting Schools; and (iii) Fund Approved Viable School Improvement Plans.
Schools, NGOs, Regional Divisions
guide:
Component
ACTIVITIES

ANNEX A-1: Upgrading ECCE Quality

- **Terms of Reference for Training-of-Trainers Program**
- **Terms of Reference for Midterm Review/ Follow-up to the 1994-95 ECCE Survey**

Objective:

To increase understanding and application by ECCE teachers of ECCE developmental curriculum and pedagogical approaches which would improve the language, cognitive, emotional, social and sensory-motor development of children in ECCE centers.

Outputs:

- An institutionalized, effective and sustainable ECCE teacher training system with a cadre of highly qualified local trainers.

- Improved pedagogical and physical conditions of existing ECCE centers.

- An established and effective Secretariat for the NCECCE, which would coordinate ECCE services and monitor minimum standards for ECCE teacher training and operation of centers.

TRAINING OF TRAINERS PROGRAM

Existing Capacity

1. There are no theoretical or practice barriers in Trinidad and Tobago to the introduction of ECCE practices based on the developmental stages of early childhood. The style of training provided by SERVOL and UWI, as major training institutions, encourages such developmental approach. In their classroom, ECCE teachers already discuss their work from a developmental point of view.

Current Training Programs

2. Two major programs certify ECCE teachers: SERVOL and UWI. In addition, the School of Continuing Studies offers courses focused on ECCE. SERVOL, which operates the 148 government programs, prepares the most teachers through a two year program: one year of study and one year of supervised apprenticeships. UWI offers two teacher training programs. One program offers a six month curriculum methodology course followed by a six month ECCE center management program. These existent and future programs will be strengthened by the TOT outputs:

Training Outputs

(a) A developmentally appropriate, active learning approach curriculum in ECCE centers;
(b) A high quality pre-service training, in-service training and systematic assessment of program quality; and
(c) A cadre of highly effective ECCE trainers.

Why Train Trainers

3. Trinidad and Tobago already has a strong base for a sustainable strategy for on-going training of ECCE teachers and caregivers. Additionally, (i) on-going in-service training is required because of the high staff turnover rates; (ii) educators and caregivers need a more cost-effective, sustainable and coherent in-service training; (iii) systematic implementation of an effective, developmentally appropriate program is more likely to occur when a certified trainer is permanently responsible for program quality, which would create local ownership and expertise; and (iv) research has demonstrated that a permanent on-site training staff produces higher quality educational outcomes.

Training of Trainers (TOT) Approach

4. The TOT programs would focus both on curriculum content and on related adult-training strategies. Participants would become skilled in engaging their trainees effectively in the curriculum change process.

5. A group of 20-25 participants, selected for their demonstrated ability to train staff, would be actively involved in a one-year in-service training program that includes the following:

6. ***Training Sessions.*** Seven one-week sessions spread over 10-12 months. This schedule would allow time for integration of knowledge into daily practice. An eight week will be added to permit the development and use of local inexpensive materials for classroom use.

7. ***Training Assignments.*** Participants would complete reading and writing tasks and be actively involved in group work during the training weeks. Back at their agencies, participants would apply what they are learning by training teaching teams, observing and giving feedback to teachers, conducting workshops, meeting their support staff and documenting the training process.

8. ***Feedback and Evaluation.*** Training consultants would give feedback to TOT participants on the assignments they complete during the training weeks. Consultants would also assess participants' training skills, on-site, in the areas of workshop presentations, teacher observation and feedback, and curriculum implementation.

9. ***Materials and Equipment.*** Because of the limited financial support available to ECCE programs, special attention must be given to the development and use of common materials and equipment available within the community. Shells, bottle caps, plastic scraps, old newspapers, lumber discards, can all be employed with clear understanding of curriculum goals and the need for active learning by the children.

Mid-Term Review - Follow-up Study of Children in the Current ECCE System in Trinidad and Tobago

Objective

10. The purpose of the follow-up study is to examine the relationship between ECCE experiences at age 4 and children's development at age 7-8 in domains relevant to primary school performance, i.e., cognitive, language, academic, and social skills. Trinidad and Tobago has two ECCE systems, a Government-NGO system and a private system. Children participating in both systems have been included in a 1994-1995 "baseline" data collection and analysis, during project preparation, and consequently it will be possible to look at the preparation for formal schooling that children receive in each of these two systems.

11. The former and follow-up ECCE studies explore different types of early childhood settings and link educational process with developmental outcomes. The special strength of the combination of the present data collection (T&T, 1994-1995 ECCE Survey) and the follow up mid-term review is that it includes the features of intervention and quality-definition research. The mid-term evaluation will study the impact of the project on the young child's development and would explore the relationship of these early experiences as he/she encounters the world of primary education.

Methodology

12. ***Sample.*** The sample for the proposed activity will be the 228 children from the 57 ECCE centers who were selected, and assessed at age 4 in the 1994-95 T&T collection. At the mid-term evaluation the age-range would be 7-8 year-old first graders.

13. The 1994-95 sample consisted of 112 children from 28 Government/NGO Government/Community (G/N-G/C) centers and 116 children from 29 private preschools. ECCE centers included in the 1994-95 data collection were randomly selected from the most recent listings available to the MOE. For each center, 4 children were randomly selected form those in the appropriate age-range. The 1994-95 sample sizes have an attrition allowance built into them.

14. ***Measures.*** The major focus of the proposed activity is the assessment of children's developmental status at age 7-8. A battery of four child developmental status assessment measures is available which documents children's cognitive, language, academic, and social/emotional development. In addition, data collection will include two brief interview measures, one for families and one for teachers.

15. The use of cross-national measurements developed for the IEA Pre-primary project, 15-nation study of ECCE services, would be available for the T&T assessment. Use of materials from this 15-nation study ensures that: (i) the measures have been

developed by international groups and do not represent one ethnic or national view point; (ii) the instruments have been pilot-tested and used for actual data collection and thus are not "trial" versions; and (iii) there is broad body of findings available with which to explain, understand, and compare both the early ECCE services 1994-95 findings and the follow-up study findings.

Child Developmental Status Measures

16. *Cognitive Measure.* The children's age 7-8 cognitive measures will assess a wide range of perceptual and conceptual skills, including spatial relations, concepts of quantity and time, memory, and problem solving.

17. *Language Measure.* The language measure assesses children's use of language including expressive (e.g., sentence completion and answering questions) and receptive (e.g., following verbal directions) forms.

18. *Socio-Emotional Measure.* The socio-emotional measure assesses children's effective development at age 7-8 from the perspective of the child and of adults. Measurement is conducted in three ways: children are asked questions in an interview format, teachers are asked to rate children in their classroom using two rating instruments; and parents are asked questions in an interview format.

19. *Academic Measure.* Items assess the child's skills in several academic areas. The challenge is to present items that are developmentally appropriate for 7-8 year-olds and relevant across cultures. The academic skills measure includes the following areas: Mathematics, Reading and Science.

Adult Interviews and Questionnaires

20. *Family interview.* The interviews would document changes in family and child characteristics since age 4. The interview includes the following types of questions:

a) *Child:* e.g., significant changes in the child's physical and emotional health, care and education experiences between ages 4 and 7-8.
b) H*ousehold:* e.g., parental education and occupation changes, amount and sources of income, household size and composition.
c) *Attitudes/Beliefs:* e.g., parental educational aspirations and expectations for the child, parental evaluation of child's ECCE settings/experiences.

21. *Teacher Interview.* Interview requests information about teacher background, classroom characteristics and parent involvement.

Data Analysis

22. The overall purpose of the follow-up study data analysis is to relate children's experiences at age 4 to their developmental status at age 7-8. The results will highlight the types of early childhood experiences and learning environments that promote children's subsequent development. Some analysis will be done on the comparison between the Government/NGO run ECCE centers and the private centers. However, the focus of data examination would be to identify relevant variables in the child's early childhood experiences (e.g., frequency and content of adult-child interactions, family background characteristics, percentage of time spent in preschools on pre-academic activities and teacher/parent beliefs about the importance of different areas of development for young children for academic performance.). It is the quality of ECCE rather than the type of management (public vs. private) that predicts later development.

ANNEX A-2: Increasing ECCE Quality

- **Sample Advertisement for Community Proposals for Establishing ECCE Centers in their Communities**
- **Existing Community Contributions in Public ECCE Centers Run by ECCE NGOs**

Objective:

To increase access of low income families to ECCE services, while strengthening community and parental support.

Outputs:

- 50 new community-NGO operated ECCE centers in disadvantaged communities.

- Trained 300 new teachers in ECCE curriculum and pedagogical methodologies appropriate for the developmental stage of 3-5 years old.

- An strengthened and expanded outreach program for parents in low income communities and an enhanced regional supervisory and supportive services for ECCE centers and their communities.

A NATIONAL APPEAL

Early Childhood Care and Education for Every Constituency

The national Council for Early Childhood Care and Education, has decided to launch a national program to expand Early Childhood Care and Education in every constituency in Trinidad and Tobago. As a result we are inviting you to apply for the setting up of one (1) Early Childhood Center in your Constituency according to the following terms and conditions:

(d) The Center should serve the needs of one of the most disadvantaged communities in your constituency.

(e) The community should be one which is sufficiently organized to lend solid support to the project. This is not to be seen as a hand out of the National council to the community but rather the result of the community and the Council working together to achieve the desired objective.

(f) The community should have ownership of a suitable piece of land on which a structure may be built and the population should be large enough to assure a steady stream of thirty to forty-five (30-45) children between the ages of 2 1/2 to 5 years.

(g) The constituency, supported by its parliamentary representative, would encourage the business community in the area to support the project by contributing part of the finance required for the building and equipping of the Center with the community contributing their labor.

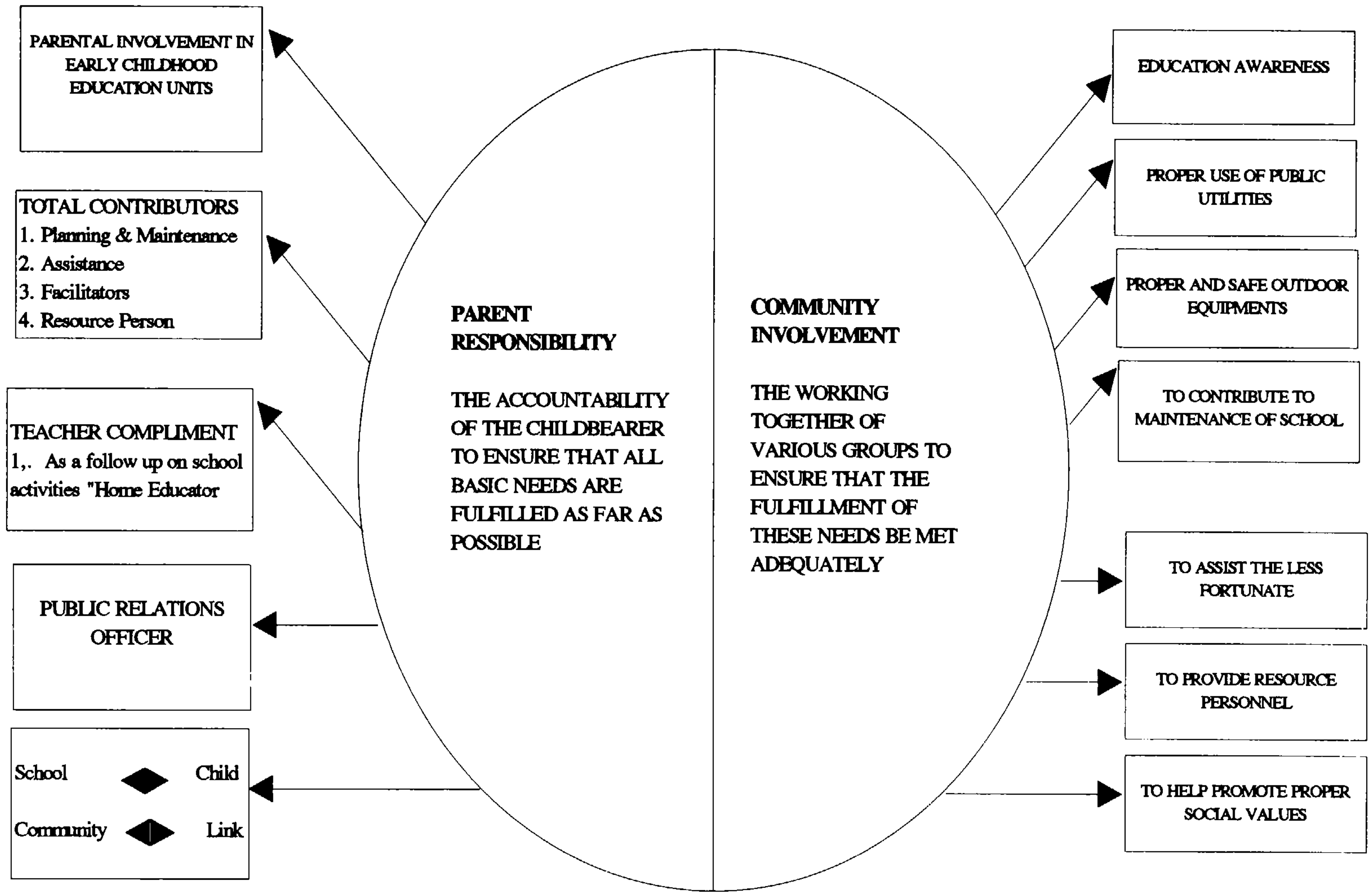
Should you be interested in this project, please write to:

The Secretary
National Council for Early Childhood Care and Education
Ministry of Education
Alexandra Street
St. Clair, Port of Spain

Please include the necessary assurances that the selected community is willing to comply with the above mentioned terms and conditions.

ANNEX A-2

SAMPLE OF COMMUNITY CONTRIBUTIONS IN EXISTING ECCE CENTERS MANAGED BY NGOs



ANNEX B-1: Classroom Instruction and Curriculum Strengthening

- **Training System Strategy**
- **Training Need Assessment and Request Matrix**
- **Terms of Reference for Bachelors in Education Program**

Objective

The main goal of the proposed training strategy is a strong school staff development climate characterized by effective leadership and a responsive support system.

Outputs

- A training system which targets educational actors at every level (training institutions, school supervisors, curriculum facilitators, principals and teachers) both as trainees and as key trainers.

- A school-level coaching and support system by and for teachers and principals.

- A simple, flexible and gradual staff development program. With minor adaptations the proposed training strategy would be used across the different project components.

- An appropriate and sustainable training strategy.

The Training Strategy: Classroom Instruction and Curriculum Strengthening

1. The training program comprises three key interventions: (i) central TOT workshops; (ii) regional/school clusters' training workshops; and (iii) school-based coaching and support (see figure 1 below). The first two training initiatives are intended to support the third. The multi-level structure seeks to phase-out the distinction between external in-service training and in-school staff development. The expected impact of the training strategy are positive changes in leadership, school climate, and teaching and learning processes.

TOT Workshops

2. TOT Workshops would bring together international recognized leaders in a particular field of teaching and assessment with national experts and school leaders to assess jointly specific problems facing the sector and locally design improved teaching and learning strategies. Simultaneously, the TOT workshops would provide training for teacher colleges and regional staff, as well as for principals and leading teachers specialized in a particular field. Combining technical assistance from international and national experts with a TOT workshop would provide a forum to adapt proven external experiences to specific contexts in Trinidad and Tobago.

3. Trainees in turn would disseminate improved, and locally adapted, pedagogical methods through their training institutions, regional divisions and schools. Teacher colleges, through funds provided by the project, will integrate into their curriculum courses reflecting improved teaching and assessment methodologies. Supervisors and facilitators will learn, disseminate and apply improve supervision and school support strategies. Principals and teachers will provide a direct linkage between central workshops and in-school ownership and practice of pedagogical methods.

Regional/School Cluster Workshops

4. During the second phase, the MOE will form 16 teams (2 per region) from the TOT participants, consisting of one curriculum facilitator and one leading teacher. These teams will facilitate regional workshops for principals and teachers representing school clusters. Syllabus for the regional training will be an output of the TOT workshops. The national experts, who assisted in conducting the TOT workshops, would provide required technical assistance and follow-up support to the regional training teams. Participants for the regional workshops will be selected from principals and teachers willing to become coaches and training resources in their school clusters.

Figure 1 ***Training Strategy: Classroom Instruction and Curriculum Strengthening***

Training Type	Technical Assistance and Follow Up	Instructors	Trainee
Training-of-Trainers Workshops	• International Experts	• National Experts (e.g., University of the West Indies)	• Teacher Colleges • School Supervisors • Curriculum Facilitators • Leading Principals and Specialized Teachers
Regional/Cluster Workshops	• National Expert (e.g., University of the West Indies)	• Curriculum Facilitators and Leading Teachers	• Principals • Resource Teachers (from school clusters)
School-Based Coaching and Support	• School Supervisors and Facilitators	• Regional Workshop Participants (Principals and Resource Teachers)	• In-School Staff Teams • One-on-One Teachers and Principals

⟷ Line indicates trainees becoming trainers and instructors providing follow up support and technical assistance

In-School Coaching and Support

5. The final step in the technical assistance *cum* training strategy is the development of in-school training, coaching and mentorships by principals and resource teachers.[1] Resource teachers would be motivated and enthusiastic individuals who have attended regional workshops and have successfully implemented improved instruction techniques in their own schools. Linking external training inputs with an internal coaching system emphasizes mutual learning, transmission of improved and tested instructional methods by resource teachers, and the final adaptation of external technical assistance into the socio-cultural realities of classrooms in Trinidad and Tobago.

6. A longer-term goal, once leadership skills and an appropriate support system have been strengthened, is increased school-based decision-making on specific training (such as writing and reading skills, teachers' ability to design classroom tests, etc.). School teams would

[1] To a certain extent, the existent on-the-job teaching training programs emphasize this approach. Also, some neighboring principals visit each other's schools and share teachers on an *adhoc* basis.

recommend specific areas to be covered by subsequent TOT workshops, regional workshops and school-based training. (See Training Planning and Request Matrix, p.52.)

Training Strategy: Early Childhood Care And Education

7. The Early Childhood and Education component closely follows the proposed training strategy. In the ECCE case, the component would finance both pre-service and in-service training and the development of a supervision system for ECCE centers.

Figure 2 Technical Assistance *cum* Training Strategy: ECCE

Training Type	Technical Assistance/ Follow-Up	Instructors	Trainee
Training-of-Trainers Workshop	• International Experts	• International and National Experts	**Pre-Service Training Institutions**: • SERVOL Trainers • UWI Staff • Teacher Colleges **In-Service Training Providers** • SERVOL Field Supervisors • Regional ECCE Facilitators
Pre-Service Training Programs	• TA to Standardize Curriculum, Quality Standards, and Accreditation	• SERVOL Training Program • UWI Teacher Training Program	• 160 Existing Untrained Teachers • 300 New Teachers
Regional In-Service Training Workshops	• SERVOL Training Program • UWI Teacher Training Program	• SERVOL Field Supervisors • Regional ECCE Facilitators	• 300 Existing Teachers • 150-300 Newly Hired Teachers
School-Based Coaching and Support	• SERVOL Field Supervisors • Regional ECCE Facilitators	• ECCE Resource Teachers	• 148 Existent ECCE Center Staffs • 50-100 New ECCE Centers

⟷ Line indicates trainees becoming trainers and instructors providing follow up support and technical assistance

Management of the Training System

8. The PCU would be responsible for assisting in the management and coordination of the above system during the life of the project. The coordination and implementation of the TOT workshops would be the responsibility of the MOE division or implementation agency (e.g., ECCE NGOs) responsible for the technical area to be covered (e.g., curriculum and instruction, textbooks and instructional materials, maintenance and repair of schools, community participation, planning and management etc.). Delivery of training would be contracted out to the UWI, the Teachers' Colleges, local private firms, and foreign universities and institutions. The respective Division Director and the Chief Education Officer will be responsible for identifying appropriate international and national experts. The Director of Curriculum Development in consultation with the Director of School Supervision would provide logistical support for the regional workshops to be conducted by curriculum facilitators and leading teachers. The regional divisions are responsible for supporting, facilitating and monitoring the school-based training and coaching strategy. The PCU and the Training and Organizational Development Division will collect and manage information on the workshops conducted, personnel trained, financial support, and expected and actual outputs.

Sustainability of Training Program

9. Two events should gradually improve the sustainability and reduce the recurrent costs of delivering the in-service training program described above. First, the use of top international specialist jointly with national experts and regional staff would increase local capacity and technical assistance resources. Second, strengthening and supporting the self-development capacity of principals and teachers will provide the most training value for limited financial resources.

Evaluation

10. The MOE would evaluate the in-service training system in two ways:

a) Formative evaluations of the extent to which a school staff has adopted school-based in-service training in randomly selected primary schools in three categories: high, medium and low risk schools; and
b) Periodic observations by supervisors and facilitators to assess changes in school climate (leadership, motivation, behavior) and teaching and learning processes. In addition regional support staff would monitor training impact on the implementation and delivery of project inputs (instructional materials, staff rooms, community promotion, etc.).

11. Training monitoring indicators are detailed in the monitoring and evaluation annex. Results of the standardized achievement tests in standard 1, 3 and 5 grades,, in addition to the mid-term evaluation, would provide information on student achievement in schools implementing the training program and applying new pedagogical and curriculum concepts.

Training Needs Assessment and Request Matrix

(1) TRAINING TARGET GROUP (please be specific: e.g., Infant 1-2 teacher, Supervisor I, etc.)	(2) SPECIFIC RESPONSIBILITIES AND TASKS	(3) PRESENT ABILITIES AND KNOWLEDGE	(2) - (3) TRAINING REQUIRED TO INCREASE CAPACITY FOR TASKS DETAILED IN COLUMN #2	INDICATORS OF APPLICATION OF TRAINING IN RESPONSIBILITIES AND TASK

Terms of Reference for Bachelors in Education Program

Objective

12. To support the professionalization of primary school principals and leading teachers through the establishment of a part-time, flexible Bachelors in Education (B.Ed.). The target of the program, during the life of the GORTT/IBRD-financed project, would be to provide a demand-based program for up to 700 principals and leading teachers.

Background

13. At present, the thrust of the education system in Trinidad and Tobago is towards:

(i) Improvement in classroom processes;
(ii) Strengthening of Curriculum especially for Languages Arts, Mathematics and Aesthetic areas - Arts and Craft, Music, Drama and Physical Education;
(iii) Decentralization of central administration vis-à-vis empowerment of principal;
(iv) Introduction of School-based management; and
(v) Enhancement community participation in education.

14. As such, the proposed training program should focus, among other things, on providing principals with concepts and skills in dynamic leadership and effective management practices.

The B.Ed. Program

15. The Bachelor of Education (Elementary/Primary) is based on the proposition that teachers must have breadth of knowledge and experience in at least two fields the curriculum, in addition to substantive training in school management and leadership.

16. The B.Ed. degree must offer flexibility two complete the program in 3-4 years, given that (a) some distance education courses may be available at certain times and not at others, and (b) that candidates who enroll in the program are also working full-time in teaching positions. In addition, the program should include course sequences that take into account student's prior education and experience

Entrance Requirements

17. Candidates will be admissible to the degree program for primary school principals and leading teachers if they have are holders of a two-years Teachers' Training Diploma with considerable experience as practising teachers/principals in primary schools. A numbe of participants would have additionally completed the Certificate in Education Programme at the UWI.[2].

Qualifications of Participants

18. As for current credentials, all prospective participants would be holders of a two-year Teacher's Diploma with considerable experience as practicing principals and teachers in primary schools. A number of participants would have, additionally, completed a Certificate in Education Program at UWI.

19. In respect of academic standing, all participants would have attained requirements for G.C.E. (O Level) or equivalent examination. However, there would be several with Advance Levels and a few with even University Degrees.

[2] Candidates who hold teaching certificates may apply to receive advance credit.

Curriculum

20. The proposed training program should focus, *inter alia*, on providing principals with concepts and skills in dynamic leadership and effective management practices. In this context, it is suggested that courses in the following areas should form the core curriculum for all participants:

(a) Management Studies: including, among others, topics such as communication, conflict resolution, community organization, and management of curriculum, human and physical resources, time and finance;

(b) Diagnosis, remediation and effective delivery of instruction in Language Arts, Mathematics, and a prefered option; and

(c) Planning and project management.

ANNEX B-2: Textbooks and Instructional Materials

- **MOE's Textbooks and Instructional Materials Policy and Implementation Plan**
- **Textbook Evaluation Procedures**
- **Terms of Reference for MOE Textbooks Coordinator**

Objective

Reduced cost of education for needy families and availability, quality and appropriate use of textbooks and other instructional materials in the classroom.

Outcomes

- Available and properly used textbooks for an estimated 75,000 poor 5-11+ year old children (35% of primary school enrollment).

- Available supplemental reading books and instructional materials in 500 primary schools to support, *inter alia*, the teaching of math, science and aesthetics (arts and craft, music and drama).

- Developed of local capacity to produce quality and low cost instructional materials.

Available and Affordable Textbooks Program

MOE Textbook Policy

23. The MOE will promote a school textbook loan system for low income children (about 35% of primary students enrolment. The textbooks would belong to the MOE, managed by the school and loaned free of charge to poor students. Additionally, the MOE will encourage in more affluent schools the voluntary set up of school textbook rental schemes to extend the use of textbooks and reduce costs.

Textbooks Free Loan System

24. Books free of charge will be provided to rural schools and urban schools with a large proportion of low income (about US$116/month or less) students. A survey of availability of instructional materials confirmed that rural schools are three times as likely to be less prosperous and with the greatest number of students without books.

25. In schools where only a portion of the student population do not have textbooks, principals and teachers would identify the need and apply to the MOE for the respective allocation of textbooks for a loan system, which the school will manage. School supervisors will monitor school use and management of the loan textbook program

Identification of Textbooks

26. Schools will identify appropriate textbooks from two sources: a short list provided by the MOE, which would have been selected by the Textbook Committee and, in the case of reading books, book fairs set up by publishers. The MOE would invite interest publishers to present their textbooks to principals and teachers in open fairs, where school staff may inspect books, ask questions to the publishers (if available) and subsequently fill out forms requesting and prioritizing titles. These titles will be reviewed by the MOE textbook committee for approval.

27. The MOE would publish the list of acceptable books including their current prices. The MOE would only subsidized books up to a certain price range. Book lists would be available around April for the following school year. The official book list would be updated as needed.

Textbook Ordering and Distribution

28. Textbook ordering and distribution will be selected based on the most cost-effective and efficient method for each region. Most textbooks will be procured centrally by the MOE based on school staff selection from short lists and approved book fairs' titles. In certain cases (e.g., rural and isolated areas), schools or regional offices may apply to receive vouchers for decentralized procurement of textbooks from local sellers.

Textbook Rental System

29. As a gradual and voluntary change form the parent purchase system, schools may complement the textbook loan program for poor children with a rental system for their non-disadvantaged students. Parents, through their PTA, would buy textbooks to build the school stock and would extend the life and use of books by renting them among different cohorts and establishing a maintenance and repair program within the school. Based on an average book life of 3 years, schools where parents have opted for a rental system would charge annually about 1/3 of the local price for textbooks.

30. The PTA would work in partnership with the schools to manage and maintain the Book fund. As part of their school improvement plans, participating schools could request support from the MOE school-based management fund to establish a viable system, as well as seed capital funds to initiate a rental scheme.

Textbook Evaluation Procedures

31. The following are the proposed steps for evaluation of MOE subsidized textbooks:

(a) Publisher's and Schools (through selection in Book fairs) Submit Books to Be Evaluated

(i) Advertise invitation for review of books and deadline.
(ii) (It is the publishers' responsibility to submit materials for evaluation by the annual deadline.)

(b) Pre-Review of Books to Be Evaluated
Responsible: Selected Committee Member(s)

(i) Preliminary check-through to assess conformity to the topics in the intended subject curricula.
(ii) Decide on a cut-off edition date for books acceptable for evaluation
(iii) Cut-off date would vary for each subject to reflect differences in speed of new developments in each disciplines.

(c) Review of Books Passing Preliminary Selection
Responsible: Independent Reviewers

(i) A comprehensive evaluation using an evaluation guide in curriculum content match, suitable methodology, language and style relative to intended audience, culture/religious background, design and illustration, price and efficient distribution considerations.
(ii) Specification of required teacher training for appropriate use of textbooks.

Categorization and Selection of Books
Responsible: Selection Committee

(d) Based on the technical evaluation of independent reviewers:
  (i) Categorize evaluated books as *Acceptable* (approve for use by students in schools), *Not acceptable* (cannot be used in schools), *or Acceptable for stated purpose* (can be used by teachers as reference materials in schools).
  (ii) The "acceptable" textbooks would then be examined in terms of price and efficient distribution to produce a short list from which schools can choose from. The list will be categorized by subject, grade level and price range.
  (iii) Short lists are drafted and distributed to the schools

Terms of Reference For MOE Textbooks Coordinator

As MOE Advisor

a) Advises the Divisions of Curriculum and School Services on all textbook and other book matters.
b) Communicates with publishers, printers and booksellers on all matters relating to books in schools.
c) Manages manuscript development and testing activities of the MOE.

As Secretary of the Textbook Selection Committee

d) Ensures the annual updating and distribution of short lists for MOE subsidized books to schools, publishers and booksellers.
e) Visits schools to observe use of textbooks in order to identify book needs for future book list updates.

As Planner for School Book Loan/Rental Scheme

f) Oversees allocation of subsidies for poor students' textbooks and price ranges.
g) Calculates MOE annual subsidy commitments.
h) Assesses school supervisors' reports on the operation of the book loan program.
i) Provides technical assistance and advice to schools and PTAs requesting the introduction of a book rental system for all students.

ANNEX C: UPGRADING THE PHYSICAL ENVIRONMENT

- **Matrix of Proposed School Construction Program by Design Teams and Construction Packages**
- **Phasing of Primary School Construction**
- **Summary of Personnel Expenditure for Proposed New, Replacement and Extended Primary and Secondary Schools**

Objective

To improve the physical environment for teaching and learning by reducing overcrowding and lack of student places in fast growing neighborhoods in disadvantaged communities.

Outputs

- 15 new and 15 reconstructed primary schools with appropriate facilities, equipment and flexible and light-weight furniture.

- 16 extended and renovated primary schools to optimize the use of existent physical structure, provide better working conditions for staff and make available appropriate equipment and flexible and light-weight furniture.

- A cost-effective strategy to increase access of primary education graduates to the secondary level and pilot the construction of 3-4 secondary schools.

PRIMARY SCHOOL CONSTRUCTION PROGRAM

• DESIGN TEAM • TYPE OF CIVIL WORKS (# of schools) • School Name	ENROLLMENT CAPACITY (EXIST) + NEW
TEAM 1 - ST. GEORGE WEST	
A. NEW SCHOOLS (3)	
1. Bamboo Settlement Government 2. Beetham Estate Government 3. Caledonia Government	420 600 840
B. REPLACEMENT SCHOOLS (1)	
4. Nelson Street Boys RC	840
C. EXTENSIONS/RENOVATIONS (2)	
5. Cocorite Government, Add't 6. Febeau Government, Add't	(360) + 120 (380) + 460
TEAM 1 SUBTOTALS:	(720) 3,280
TEAM 2 - ST. GEORGE EAST	
A. NEW SCHOOLS (4)	
1. Maloney East Government 2. Malabar Government 3. Santa Rosa Hts. Government 4. Bonair West Government	840 840 840 750
B. REPLACEMENT SCHOOLS (0)	
C. EXTENSION/RENOVATIONS (2)	
5. Arouca Government Add't 6. Bourg Moulatresse RC	(640) + 200 (520) + 320
TEAM 2 SUBTOTALS:	(1160) + 3,790

TEAM 3 - ST. GEORGE WEST	
A. NEW SCHOOLS (2)	
1. Edinburgh Government 2. Chaguanas North Government	840 360
B. REPLACEMENT SCHOOLS (2	
3. Londenville Government, Add't 4. Gran Couva RC	840 360
C. EXTENSIONS/RENOVATIONS (2)	
5. Cunupia Government., add't 6. Palmiste Governmnt, Add't	(400) + 440 (280) + 140
TEAM 3 SUBTOTALS	(680) + 3,460
:	
TEAM 4 - ST. ANDREW/NARIVA	
A. NEW SCHOOLS (3)	
1. Valencia Government 2. Mile End Government 3. Kernahan/Cascadous Government*	660 30υ 360
B. REPLACEMENT SCHOOLS (2)	
4. Aripo RC 5. Cumuto Presbyterian	240 240
C. EXTENSION/RENOVATIONS (1)	
6. Madras Government, Add't	(320) + 130
TEAM 4 SUBTOTAL:	(320) + 1,930

TEAM 5 - CARONI/VICTORIA	
A. NEW SCHOOLS (0)	
B. REPLACEMENT SCHOOLS (3)	
1. Carapichaima RC	840
2. Caratal South	240
3. Couva South Government	840
C. EXTENSION/RENOVATIONS (3)	
4. San Fernando Girls, Add't	840
5. Vos Government, Add't	840
6. Harmony Hall Presbyterian, Add'tl	360
TEAM 5 SUBTOTAL	2,920
TEAM 6 - VICTORIA	
A. NEW SCHOOLS (1)	
1. Matilda Government	720
B. REPLACEMENT SCHOOLS (4)	
2. Princes Town Methodist	480
3. Iere Government	600
4. Indian Walk Government	840
5. Ste. Madeleine Government	540
C. EXTENSION/RENOVATIONS (1)	
6. Fith Company Baptist, add'l.	(400) + 230
TEAM 6 SUBTOTALS:	(400) + 3,410

TEAM 7- ST. PATRICK/VICTORIA	
A. NEW SCHOOLS (2)	
1. Farah Street Government 2. Sobo Government	840 300
B. REPLACEMENT SCHOOLS (1)	840
3. Cedros Government	390
C. EXTENSIONS/RENOVATIONS (2)	
4. Fanny Village Government, add't 5. Cap-de-Ville Government, add't	(400) + 440 (400) + 120
TEAM 7 SUBTOTALS:	(800) + 2,090
TEAM 8 - TOBAGO:	
A. NEW SCHOOLS (0)	
B. REPLACEMENT SCHOOLS (2)	
1. Scarborough Methodist 2. Delaford RC	720 300
C. RENOVATIONS (3)	
3. Castara Government, add'l 4. Bucco Government, add'l 5. Ebenezer Methodist, add'l	(225) + 0 (190) + 60 (200) + 100
TEAM 8 SUBTOTALS:	(615) + 1,180
Total Existing and Increased Capacity in Renovated/Extended Schools	**(4695) + 3760**
Total Capacity in Replaced Schools	**8,360**
Total Capacity in New Schools	**9,990**

PRIMARY SCHOOL CONSTRUCTION WORKS
PHASING OF CONSTRUCTION

PHASE I Construction Completion: 75% 1997, 25%1998	PHASE II Construction Completion: 75% 1998, 25%1999	PHASE III Construction Completion: 75% 1999, 25%2000	PHASE IV: Construction Completion: 75% in 2000, 25% in 2001	PHASE V Construction Completion: 75% in 2001, 25% in 2002
NEW (4) Capacity	NEW (3) Capacity	NEW ((3) Capacity	NEW (3) Capacity	NEW (2) Capacity
1. Maloney Gov't (840) 2. Valencial Gov't (660) 3. Edinburgh 500 Gov't. (840) 4. Farah Street Gov't (840)	1. Bamboo Govt (420) 2. Beetham Govt. (600) 3. Malabar Govt. (840)	1. Santa Rosa Govt. (840) 2. Bon Air West Govt. (750) 3. Mile End Govt. (300)	1. Matilda Govt. (720) 2. Chaguanas N. Govt. (840) 3. Sobo Govt. (300)	1. Kernaham Govt (360) 2. Caledonia Govt. (840)
REPLACEMENT (5)	REPLACEMENT (3)	REPLACEMENT (3)	REPLACEMENT (2)	REPLACEMENT (2)
5. Carapichaime RC (840) 6. Longdenville Gov't (840) 7. Caratal RC (240) 8. Princess Town Methodist (480) 9. Cedros Gov't (390)	4. Aripo RC (240) 5. Gran Couva RC (360) 6. Ste Madeleine Govt(540)	4. Nelson Street Boy's RC (840) 5. Iere Govt. (600) 6. Scarborough Methodist (720)	4. Couva South Govt. (840) 5. Indian Walk Govt. (840)	3..Cumuto Presbyterian(240) 4. Delaford RC (300)
REMODELING AND EXTENSION (1)	REMODELING AND EXTENSION (4)	REMODELING AND EXTENSION (3)	REMODELING AND EXTENSION (4)	REMODELING AND EXTENSION (5)
10. Castara Govt. (0)	7. Arouca Govt. (200) 8. Cunupia Govt. (440) 9. Cocorite Govt. (120) 10 San Fernando Girl's Govt. (200)	7. Fifth Company (230) 8. Madras Govt. (130) 9. Fanny Village Govt. (440)	6. Palmiste Govt. (140) 7. Buccoo Govt. (60) 8. Ebenezer Methodist (100)	5. Febeau Gov't (460) 6. Cap-de-ville Govt. (120) 7. Vos Govt. (280) 8. Bourg Mulat. RC (320) 9. Harmony Hall Presbyterian (520)

SUMMARY OF PERSONNEL EXPENDITURE FOR PROPOSED NEW, REPLACEMENT AND EXTENDED SCHOOLS

Category	No. of Schools	Additional Teachers Required	No. of Teachers	*Projected Yearly Personnel Expenditures TT$*
New Schools	15	Principal	15	*$858,438.00*
		Vice Principal I	12	*$629,006.40*
		Teacher 1 (Std. 1-5)	319	*$12,468,148.00*
		Teacher I (Post Primary)	261	*$1,016.216.10*
Sub-total			**372**	***$14,971,838.40***
Replacements	15	Principal	0	*$0.0*
		Vice Principal I	2	*$104,834.40*
		Teacher I (Std. 1-5)	52	*$2,032,480.00*
		Teacher I (Post Primary)	22	*$859,860.40*
Sub-total			**76**	***$2,997,139.20***
Renovations and Extensions	16	Principal I	0	*$0.00*
		Vice Principal I	5	*$262,086.00*
		Teacher I (std. 1-5)	58	*$2,266,941.60*
		Teacher I (Post Primary)	25	*$977,130.00*
Sub-total			**88**	***$3,506,157.60***
New Secondary Schools	4	Principal II	4	*$255,604.80*
		Vice Principal II	4	*$248,308.00*
		Graduate Posts	148	*$7,880,289.60*
		Non-Graduate Posts	30	
		Guidance Officer	4	*$193,684.80*
		Clerk II	4	*$149,092.00*
		Library Assistant	4	*$104,788.80*
		Laboratory Assistant	8	*$201,609.60*
		School Farm Attendant	4	*$107,524.80*
		School Workshop Attendance	16	*$386,707.20*
		Clerk/Typist	4	*$96,676.80*
Sub-total			**236**	***$11,224,881.20***
Total All Schools	***50***		***772***	***$32,700,026.40***

ANNEX D-1: Management Decentralization

- **Objectives and Outputs**
- **TORs for Organizational and Management Analysis**
- **MOE and Regional Division Improvement Plans**
- **Technical Assistance and Training Strategy**

Objectives

The Education Management Strengthening Component seeks to achieve :

- Improved MOE, regional and school services;
- Enhanced MOE capacity for research, strategic planning and monitoring and evaluation; and
- Increased autonomy and leadership at the school level.

Outputs

This subcomponent would contribute to the above goal through:

- A developed viable strategy for the reorganization of MOE and regional divisions.

- A participatory approach for conducting the re-organization analysis and developing a functional decentralization plan;

- MOE, regional and school staff self-assessments of (i) their present functions, (ii) an objective criteria to improve efficiency and (iii) a strategy for management and organizational change (note: international and national experts would only facilitate the self-assessment process and would provide technical support for data analysis and development of an implementation plan); and

- MOE and regional divisions planning and management of their own improvement plans in support of the decentralization strategy.

Terms of Reference
MOE Management and Organizational Analysis

Background and Objective

1. Cabinet by Minute No.3332 of 31st December, 1993, agreed to the decentralization of the Ministry of Education (MOE) and also requested the MOE to develop an implementation plan. Subsequently, the MOE, as part of the World-Bank financed Basic Education Project, will (i) analyze the current structure and operations of the MOE, regional offices and schools; (ii) compare present operations against an objective criteria to enhance administration effectiveness, efficiency and quality; and (iii) develop a viable implementation plan to improve the organizational framework and the functional and administrative responsibilities across the education system.

Scope of the Study

2. Experts on change management and organizational development will assist the newly created MOE's Human Resources Division (HRD) to support MOE, regional and school staff in defining their management needs and objectives and in proposing an education management reform and decentralization strategy. In addition, experts will:

a) Review existing decentralization proposals including sections of the Ministry of Education Strategic Plan, the Report of the National Task Force on Education and subsequent MOE studies.

b) Through participation workshops with MOE personnel (central, regional and school level), (i) review the current functional divisions, operational procedures, management processes and information flows and (ii) facilitate the development of an objective set of criteria which would assist in making decisions on which functions and responsibilities might be decentralized.

c) Based on the participatory-developed criteria, propose a new functional and structural organization for the MOE, Regional Divisions and Schools.

d) Design the process of implementing the proposed functional decentralization, including staffing plans, technical and practical skills needed, allocation of responsibilities, authority and accountability, reporting requirement and information flows, and follow-up technical assistance and training.

e) Assist the MOE in drafting a time and resources-bound implementation plan.

MOE and Regional Divisions' Improvement Plans

3. The newly organized MOE and regional divisions, supported by the HRD, will enhance their team building and management skills by self-developing and implementing improvement plans. The divisional improvement plans will focus on outputs to support the implementation of the decentralization strategy. The project will finance the inputs (small refurbishment, goods and services) required to conduct the activities proposed in viable improvement plans.

4. Appraisal and approval of implementation plans will be done by the MOE Inter-divisional Committee members. Approval or comments will take no longer than two weeks after submission. The EPCU will provide funds and monitor the implementation of approved MOE and regional divisional plans.

5. Procurement and disbursement will be done in accordance with procurement methods and prior review thresholds defined for the respective contract categories and amounts under the project. Given the relatively small size of contracts (not exceeding US$20,000), it is expected procurement will require quotations from only three suppliers. Disbursement will be done through SOE procedures.

Technical Assistance and Training

6. During implementation of the proposed reforms, in-site, short-term management and organization consultants will provide direct training in five MOE divisions and in the eight regional offices. A local consultant would be assigned to each division for up to 2 days per week over a period of two months to provide practical assistance, training and coaching. Eventually, experienced and leading regional supervisors and MOE personnel would also be available to visit other divisions to provide one-on-one coaching to their peers. (See subcomponent matrix below).

Education Management Decentralization Strategy

Objective	Technical Assistance	Training	Participatory Group
Management and Organizational Analysis and Implementation Strategy	• International and National Management and Organizational Experts	*(Training will be provided after the decentralization analysis and implementation plan defines new staff responsibilities and needed technical and practical skills)*	**MOE Training Staff** • Staff and Organizational Development Division **Regional Managers** • SSIII from 8 Regions • SSII from 8 Regions • Leading Principals
Technical and Organizational Training	• In-Site Team Building and Management Consultant	• HRD Staff	• MOE and Regional Divisions
Development of Divisional Improvement Plans	• In-Site Management and Organization Consultant	• SSIII • SSII • Leading Principals	• Regional Staff Teams (Supervisors /Facilitators, etc.)
Inter-Regional Division's Coaching and Support	• Leading and Experienced MOE or Regional Staff		• Requesting MOE or Regional Division Teams

⟷ Line indicates trainees becoming trainers and instructors providing follow up support and technical assistance

ANNEX D-2: Sector Assessment and Evaluation Reform

- **Objectives and Outputs**
- **TORs for National Assessment Long-Term Plan**
- **Assessment and Evaluation Unit Structure**
- **TORs for Establishment of a Computerized Testing and Student Tracking System**

Objective

The proposed assessment reform would support the improved delivery of the primary school curriculum by providing information on student achievement to (i) policy makers, (ii) education managers and supervisors, and (iii) principals and teachers. Based on the generated information of student performance (i) policy makers would make necessary adjustments to sectoral strategies and propose investment projects; (ii) education managers would plan their support strategies to serve the varying needs of performing and non-performing schools; and (iii) principals and teachers would use feedback on student learning to improve classroom teaching, assessment and remedial support, as well as to identify teacher training needs and areas to be addressed in their school improvement plans.

Outputs

- A Clearly Stated Plan for National Testing, Assessment and Dissemination of Student Achievement
- A Fully Established and Strengthened MOE Division for Research and Evaluation
- An Introduced and Fully Operational Computerized Testing and Student Tracking System

Terms of Reference for the Development of A Long-Term Plan for National Assessment

7. The Ministry of Education and the sector stakeholders, through the National Task Force on Education, have called for a national plan to improve national testing in Trinidad and Tobago. The reform plan would include:

(a) a clear strategy to develop, administer, score, and report diagnostic assessment and student achievement in standard I through III, and as capacity and experience develops, it will encompass the Common Entrance Exam and school leaving exams for the primary and secondary programs;

(b) The strategy must be driven by the instructional curriculum and be subjected to broad teacher review;

(c) Quality control and security must be an integral part of any test development strategy, as well as reliability, validity, collaboration and sustainability;

(d) Based on information generated by diagnostic testing at standard I and III, the MOE will build a comprehensive database of continuos national attainment, and develop a dissemination strategy on student performance to the school and classroom level; and

(a) Develop a support system for student support and remediation. Curriculum facilitators would be trained to assess deficiencies identified in student test results and would provide assistance to improve classroom teaching and assessment methods. Principals and teacher would be trained in the new assessment methods and in follow-up strategies for teaching and assessment reforms, as well as in student remediation support.

Proposed Structure and Organization for an Assessment and Evaluation Unit (AEU) within the Division of Research and Evaluation

8. Proposed functions and responsibilities for the AEU include:

   (a) Conduct national student assessments and testing and distribute generated information for diagnosis, remediation and placement of students;
   (b) Coordinate information gathering in the performance of the education sector and establish and regularly update research and statistical data;
   (c) Provide relevant and update data to support sectoral studies, policy formulation and projected investments;
   (d) Ensure the input from special education agencies, guidance units, and the MOE Division of Curriculum Development (DCD) for test design, administration strategy, and student performance feedback to schools and other education agencies; and
   (e) Inform the public on the anticipated benefits of the testing and assessment reform, the implementation steps, and the expected impact on school-level processes and outputs.

Organizational Structure and Staffing

9. Staffing for the Testing and Assessment Organizational Structure would include:[1]

   a) An independent Teaching and Assessment Committee and
   b) An experienced Director and other professional staff with teaching and subject experience to include:
   c) An Administrative Examination Officer responsible for external and national examinations;
   d) Four Examination Officers responsible for the development of assessment design, statistical analysis and examination papers in the field of (i) Science and Mathematics, (ii) English and other languages, and (ii) Social Studies/Humanities.
   e) A Quality Control Officer to be responsible for work flow, security and accounting; and
   f) Four Test Technicians - to collect, enter, and maintain each of the databases associated with English/Foreign Languages, Math, Science and Social Studies /Humanities.

[1] The proposed staffing description does not necessarily represent additional personnel, but redefinition of functions and responsibilities of existent staff in the DRE.

Computerized Student Tracking and Testing and Assessment System

Objective

10. To use the latest computer technology, utilizing cost-effective PC desktop hardware and software, for the construction of professional quality tests, performance assessments, surveys, and lesson plans' publishing.

Technical Background Needed by DRE Staff

11. The following technical areas would be developed within the DRE through an initial six-month internship for selected staff and by in-service training and technical assistance for two-three years during project implementation:

(a) Principles and theory of measurement
(b) Testing and student tracking computer programs and systems.
(c) Use of scanning, scoring, graphics and file management programs
(d) Principles and operations of databases and the management of algorithms and retrieval strings.
(e) Student performance data bank system including programs for answer sheets, statistical analysis and report writing, capture of concomitant variables by surveys to extend the value of the achievement data, item analysis of field trials and dissemination of test results.

Pilot Testing of Computerized Test Development and Data Base Program

12. The MOE will pilot the evaluation of the new Standards I and III tests using the DRE computerized test development and student tracking system. The pilot would include:

(a) Test grids based on distributed curriculum syllabus
(b) Item specifications providing guidance for teachers
(c) Multiple assessment and check lists and extended response
(d) Item-writing workshops
(e) Curriculum staff editing and pretrial of the items
(f) Systematic classroom teacher review of the items
(g) Use of matrix sampling to protect classroom time
(h) Piloted reports of results to encourage teacher use
(i) Use of technology for speed and accuracy.

Development of Bank Items for National Diagnostic and Achievement Tests

13. The following critical Inputs are esstential for the effective development of national assessment bank items:

(a) The newly revised primary school syllabus in mathematics and reading;
(b) Active participation from the teaching cadre, the administrative staff, and the public; and
(c) Field Testing the contents of the item banks to insure that they are:

   (i) Instructionally sensitive, curricularly relevant, and statistically sound;
   (ii) Reliable, valid and effective testing items for classroom and national assessment instruments; and
   (iii) Applicable to various assessment instruments, including comprehensive surveys, criterion-referenced and diagnostic tests, and parallel performance exercises and lesson plans.

Local Development of a Standard V National Assessment Test

14. A long-term goal of the newly created DRE is the local development and processing of the Common Entrance Exam. International and national experts would assist the DRE in defining a viable plan for the local development of a standard V test and of the administration and processing strategy.

15. A viable proposal would make specific recommendations on issues of security, quality, continuity, reliability, validity and integrity of the local development of the CEE.

ANNEX D-3: School Based Management (SBM)

- **Description of the School-Based Management Fund (SBMP)**
- **School-Based Management Fund Structure and Management**
- **School Improvement Plans (SIPs)' Cycle**
- **SIP's Proposal Format**
- **Targeting Criteria for High, Medium and Low Educationally-at-Risk Schools**

Objective

The SBM subcomponent will encourage and support the increased involvement of principals, teachers, students, parents and other grassroots groups (e.g., NGOs) in the planning and implementation of small subprojects designed to improve their schools.

Outputs

- An strengthened school capacity to raise, plan and manage its own educational resources and to generate community support;

- Transferred capacity to educationally at risk schools through the provision of seed financial resources and technical assistance to develop and implement SIPs, promote community participation, raise additional funds and improve educational services;

- A utilized school-based management approach in the identification, preparation, implementation and management of SIPs; and

- Increased technical capacity and leadership in schools and their communities which will contribute to improving school instruction, learning and overall educational quality.

School-Based Management Program (SBMP)

16. Being a demand-driven program, the project will not identify itself school subprojects but will appraise, select and fund viable school improvement plans (SIPs) proposed by schools and their communities. in addition, MOE regional staff, the EPCU, principals and teachers from more experienced schools, and associated NGOs will assist weaker schools and communities to develop the capabilities to become increasingly self-reliant in planning and mobilizing school resources over time. The SBMP will ensure that all education stakeholders in each selected community form School Improvement Committees (SICs) to plan, implement, monitor and supervise the implementation of each SIP.

Major SIP's Categories To Be Supported By The SBMP

17. The SBMP does not subscribe specific choices of SIPs which can be considered for funding. However, given the enormous need in schools and the wide range of potential SIPs, it has been necessary to focus the SBMP's support to certain broad overall project areas that are both high priorities in the education sector's development strategy and which are especially suitable for school-based management initiatives in the present institutional and policy context. These are:

a) Instructional Materials, Physical Education Goods and Instruments to Support the Delivery of a Diversified Curriculum.
b) Materials and Equipment for the Development of Instructional and Assessment Materials.
c) Seed Resources for Educational Community Activities and Fund Raising Events.
d) Pedagogical and Team Work Capacity Building Through Training and Technical Assistance.
e) Minor Repairs of Schools and Other Physical Environment Improvements.

Training and Technical Assistance

18. Ex-ante support by regional staff, school colleagues from quality schools and NGOs would be provided to build and enhance the capacity to prepare and implement SIPs of high and medium educationally at risk schools and their communities. Additionally, technical assistance and training could be requested through individual SIPs, in support of school-specific improvement strategies.

SBMP Functions, Organization and Structure

Who	What
School and SIP Committee **Chairperson:** Principal **Members**: Teachers and Community Representatives (e.g., School PTA and NGOs and Private Sector)	• Requests TA for Project Preparation, if needed • Prepares SIP • Submits SIP plan and funding request • Manages Implementation of SIPs • Maintains Procurement and Disbursement Files for Random Ex-post Review
Regional Divisions: **Chairpeson:** SSII (Primary Education) **Members**: School Supervisors I, Curriculum Facilitators and Guidance Officers	• Appraises and Qualifies Submitted SIPs according to criteria specified in the current Operational Manual • Maintains Appraisal, Selection, Procurement and Disbursement Files for Random Ex-Post Review
Regional SIP Approval Committee **Chairperson:** School Supervisor III **Members:** SSII and Representatives of local: PTA, Principals Association, School Boards and NGO (Selected and appointed by regional districts and schools annually)	• Selects and Approves SIPs under the PCU's annual regional quota based on appraisal recommendations
EPCU **Chairperson:** Project Coordinator **Members:** Respective Deputy Coordinator, Monitoring and Evaluation Liaison Officer (MELO), and Procurement and Disbursement Advisors	• Initiates SBMP and SIPs information dissemination campaign • Assist regional divisions to classify and rank schools according to educationally-at-risk and merit criteria • Coordinates Technical Assistance and Training based on regional and school requests • Provides Guidance and Project Monitoring • Updates Process and Operational Manual Based on Periodic Evaluations • May Support Regional Committees in the Appraisal and Selection Process • Disburses Funds Based on Agreed Procedures • Monitors and Appraises Disbursement and Procurement Files Maintain by Schools and Regional Diviions • Drafts Implementation Reports (development objectives, finance and procurement) for Central Commitee and the World Bank
SBM Central Committee: **Chairperson:** Minister of Education **Members:** MOE, PS, Directors, TUTTA, Denominational Boards and National PTA	• Approves Procedures Detailed in the Operational Manual and Necessary Adjustments • Directs Policy and Programming of SBMP through Request of Studies and Monitoring and Evaluation Reports

Subproject Cycle	
The SIP cycle passes through a number of stages: promotion, appraisal, approval, implementation, supervision, monitoring and evaluation. At any stage, technical support to educationally at risk schools would assist in raising their capacity to plan, implement and monitor their projects.	
Promotion and Technical Assistance (TA)	A promotional workshop in each region will introduce the SBMP and SIP program. The promotion team will review and discuss the procedures as defined in the Operational Manual. At a regional assembly, participants will elect their representatives for the regional committee chaired by the SS III. The team will also accept requests for technical assistance and training and appraise available TA sources (NGOs, academic and technical institution, etc.) in the region. The team will collect any other region-specific data and draft a regional profile report for use in any required adjustments to the SBMP procedures and/or implementation plan.
Receipt of Proposals	As a result of the promotional activities, a number of schools with existing capacity to develop SIPs will organize, prepare and send their SIP proposals to the Regional Divisions (RDs). During the first year up to 10 SIPs per region (or 16 percent of total schools in the country) would be approved. These initial SIPs will serve as samples and incentives to educationally at risk schools to request support in organizing, preparing, and implementing their own SIPs.
Appraisal	Appraisal will start as soon as applications are received by the regional divisions. The appraisal process including examination of eligibility, field visit and preparing appraisal should take less than 2 weeks from submission of SIPs.
Approval	The Regional SIP Committee (RSC) will be the main decision making body for subprojects appraised by the RDs. One week in advance of the approval meeting, the RD prepares a summary of the appraised SIPs to be circulated to the RSC members. Approved SIPs are sent to the EPCU which reviews the information and authorizes the signing of a standard agreement between the MOE and the schools for accountability in the use of funds (if NGOs are involved, they must also be signatories). Agreed disbursement and procurement procedures begin.
Implementation	At this stage the main function of the regional districts will be to supervise, monitor and assist, when needed, in the implementation of approved SIPs. For implementation, the SBMP will depend heavily on participation by the school, local community and the voluntary sectors.
Monitoring and Evaluation	The RD assesses, through monitoring indicators, whether SIP inputs are delivered, as planned, in terms of quantity, quality, time and cost and are being used as intended. Within the SBM program, the primary need is to monitor progress during and after implementation. An annual evaluation coordinated by the RD committee assesses the overall subproject effects, both intentional and unintentional, and their impact on the quality of teaching and learning in the schools
Capacity Building	The SBMP will finance and arrange for required capacity building or training activities for schools and communities.
Coverage	Though 100% coverage is possible, the goal of the program is to assist 100% of the educationally high risk schools, 75% of the medium risk schools and 50% of the low risk schools. Allocation formulas would provide resources for additional technical assistance for low capacity schools and those in critical financial need.

Proposal Format

19. A user friendly Logical Framework would provide the parameters for preparing SIP plans and funding requests.

***Dear School Principal:* Please answer the following questions, first, in a general assembly with your PTA, teaching staff and other members of your community (NGOs, private businesses, church groups, etc.). During this general discussion, also select a smaller committee which will refine the answers provided, as well as detail and draft the school improvement plan (SIPs). Committee- endorsed SIPs should be submitted to your regional education office for funding approval.**

***Goal* (Vision):** Ultimately what does your school and community want to do for the education of your children?

Purpose: How would your students, school and community have changed after the implementation of this plan?

Impact Indicators: What will others be able to see in your students, school and community when you achieve these changes?

***Capacity:* (strengths)** What are positive examples of how your school and community cooperate now that will enable you to achieve the changes desired? **(weaknesses)** What are existing problem areas in how your school and community work and cooperate now? How can you improve them?

Outputs: What activities would you carry out to achieve the ***purpose*** and strengthen the ***capacity*** that you detailed above? Who will implement each of these activities? When?

Inputs: What support services and physical goods you need to implement these activities? How much each of these services and goods would cost? Can you negotiate for lower prices with different suppliers? Can any member of your community contribute, free of charge, additional services or physical goods? Who will control and be accountable for the funds to be provided? Who will purchase these services and goods?

Monitoring Indicators: Who will keep records of purchases and use of funds? What will others be able to see when your school and community complete each of the above activities by utilizing the requested services and physical and financial resources?

Please List Any Additional Documentation Provided with these Funding Proposal

SBMP Operational Procedures

20. The School-Based Management Program operational manual will include, *inter alia*, the procurement, disbursement and accountability procedures for the implementation of approved SIPs. Simple standard forms and accounting mechanisms will be included in the manual. The manual would be agreed by the Bank and adopted by the MOE prior to project effectiveness. Modifications and amendments to the manual would be discussed and agreed during regular Bank supervisions and annual reviews.

Procurement

21. Given the small size of SIP contracts and the wide range and timing of individual subprojects, packaging large groups of subprojects for procurement purposes would be unlikely. The cost of each individual project will not exceed US$7,000 and individual schools will not receive an aggregate allocation greater than US$20,000 during the life of the project. Contracts for minor works and goods would be awarded on the basis of lump sum, fixed price contracts through quotations obtained from three eligible suppliers. When price quotations cannot be obtained (e.g. in rural areas) direct contracting may be used up to an agreed maximum aggregate amount. Appropriate explanation and related documentation for direct contracting must be kep in the SIP files. In case of requests for consulting services (e.g., training) the SBM operational manual will indicate standard terms of reference and scale of fees. The SIP committee will be responsible for shopping procedures and selection of the best offer for contracts.

Disbursement

22. Three modalities would be used for the flow and control of funds for SIPs: (i) direct payment to suppliers by PCU; (ii) reimbursement by the PCU of previously authorized purchases; and (iii) opening of a regional special account for use of individual schools and monitored by the respective regional division. The regional account option will not be used until after the first year of project implementation, when lessons learned on the most efficient flow of SBMP funds to the schools will be available. Funds for approved SIPs may be less than the estimated costs of the proposed items, and the schools and community would agree to raise the additional required funds.

Accountability

23. The award of funds to schools and communities would be publicly announced. Its purpose (such as the construction of an additional classroom or the purchase of equipment) would be public knowledge and the SIP committee would be the curator of these funds. The committee will maintain appropriate files (price quotations, payment receipts, delivery receipts, etc.). As part of their regular visits to the schools, school supervisors will monitor the appropriate implementation and use of the physical resources requested under the SIPs. The regional divisions will maintain consolidated information of the SIPs approved and being implemented in their educational region. As part of the annual project account audits, the PCU will include audits of approved SIPs' files in the regional offices and in randomly selected schools. School audits will include random confirmation of physical resources and other outputs financed by the SBM program.

Criteria for Determining Educationally High/Medium/Low Risk Schools.

Criteria 1.

20. Test Scores, (1994) Common Entrance Examination According to 3 Subject Areas: Mathematics, English and Essay. These test scores were analyzed by percentage of those not scoring a desirable minimum mark and those attaining above the minimum desirable mark in each subject area per each primary school and regional education division. Schools with more than 60% of their students not attaining a minimum desirable mark in all three subject areas were categorized as high risk schools, those with more than 60% of their student not attaining a minimum desirable mark in two subject areas were considered medium risk, and those with more than 60% of their students attaining above the minimum desirable mark in at least two subjects were categorized as low risk.

Criteria 2.

21. Financial need based on the number of children in primary school, according to region, who need financial assistance (mainly book grants): 80 to 100% need are categorized as high risk, 40-80% medium risk and below 40%, low risk.

22. The final classification was based on the combination of the criteria. The number of schools in each risk level by region and the number of borderline high risk schools are detailed in the following tables below.

Table 1

Criteria 1	Criteria 2	Educational Risk Factor
CEE Scores	Financial Assistance	Final Classification
	H	H
H	M	H
	L	H
	H	H
M	M	M
	L	M
	H	M
L	M	L
	L	L

Table 2

Regional Division	Total # of Schools	Schools Educationally at Risk					
		High		Medium		Low	
		No	%	No.	%.	No.	%
Port of Spain and Environs	69	6	8.7	34	49.3	29	42.0
St. George East	84	4	4.8	47	56.0	33	39.2
North Eastern Counties	43	8	18.6	19	4.2	16	37.2
Caroni	66	3	4.5	44	66.7	19	28.8
Victoria	72	2	2.8	45	62.5	25	34.7
South Eastern Counties	51	10	19.6	27	52.9	14	27.5
St. Patrick	56	3	5.4	36	64.2	17	30.4
Tobago	32	0	0	15	46.9	17	53.1
TOTAL	473*	36	7.6	267	56.4	170	36.1

*** Total numbers of schools in Trinidad and Tobago at present is 476 (data for two schools in St.George East was not available)**

Borderline Schools: those where 50-59% of students fail the CEE.

Table 3

Regional Division	Total # of Schools	High-Medium Risk Borderline Schools	
		No.	% of Regional Total
Port of Spain and Environs	69	30	43
St. George East	84	23	27
North Eastern Counties	43	19	44
Caroni	66	8	12
Victoria	72	19	26
South Eastern Counties	51	21	41
St. Patrick	56	8	14
Tobago	32	11	34
TOTAL	473*	139	29

*** Total numbers of schools in Trinidad and Tobago at present is 476 (data for two schools in St.George East was not available)**

ANNEX E: PROJECT MANAGEMENT

- **Proposed Strategy**
- **Organizational Matrix: EPCU and MOE Inter-Divisional Project Management Committee**

Objective

To institutionalize the management of the project as part of the normal operations and portfolio of the MOE divisions, assisted by a project coordination team of mostly MOE staff.

Outputs

- An MOE Inter-divisional Management Team of all MOE Directors, the CEO, PS and the PCU Coordinators;
- A participatory management of the project which encourages active involvement of all project stakeholders; and
- An increasingly capable PCU in the various areas of project management: financial, procurement and disbursement planning, implementation and monitoring, as well as conscensus building, flexibility and innovation.

Proposed strategy for the Management of the Basic Education Project

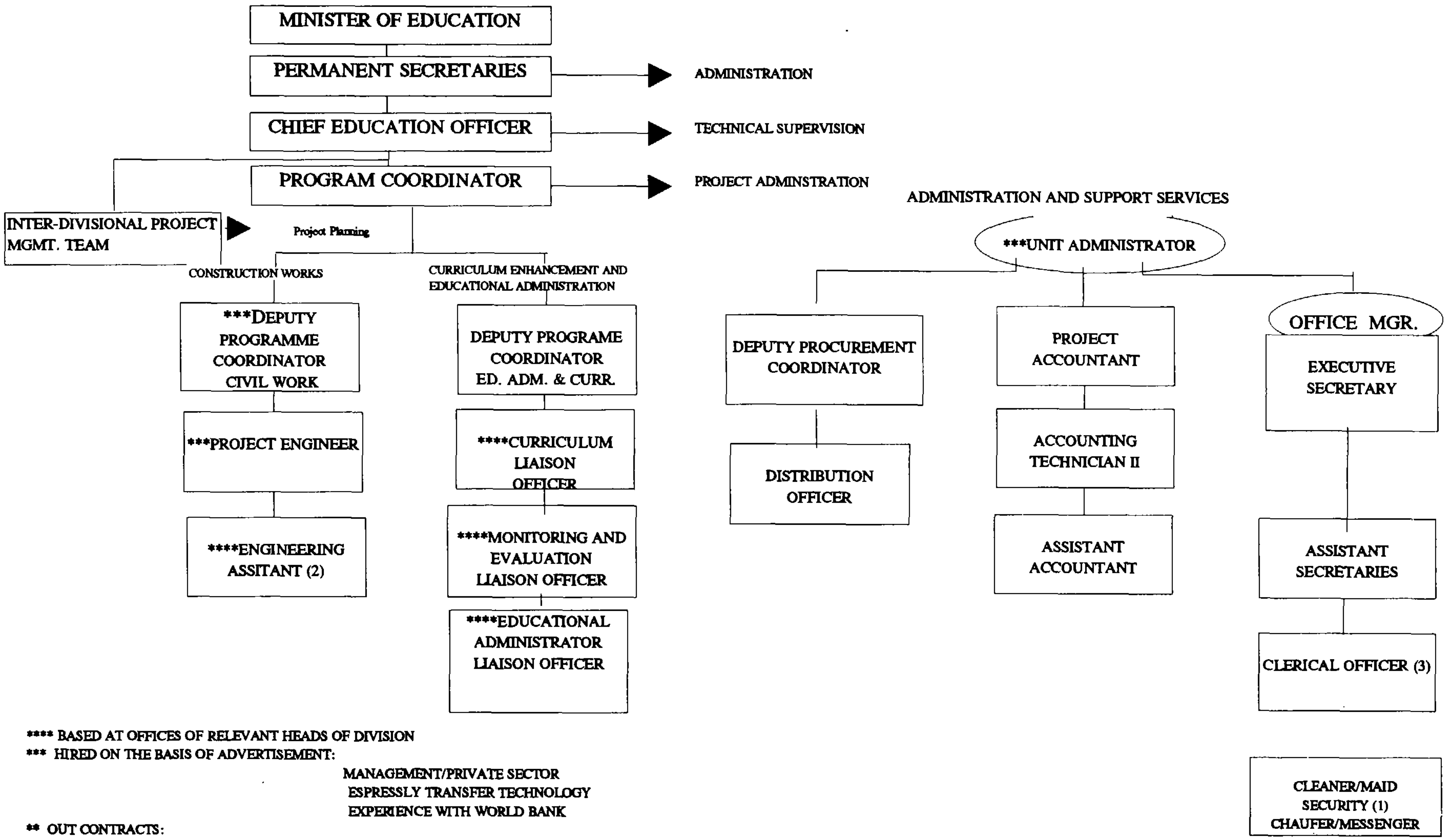
1. The project will be coordinated by an Education Programme Co-ordinating Unit (EPCU) within the Ministry of Education. Since the project targets the realization of a large portion of the National Task Force on Education report, the project is to be conceived as part of the normal work of the Ministry of Education. In this context, the PCU will be an extended arm of the Heads of Division

2. In order to ensure that the Heads of Divisions work in unison with the EPCU, the Ministry of Education has established an Inter-Divisional Management Team comprising the Chief Education Officer, Permanent Secretary, Heads of Divisions and the EPCU. Within the structure of the Inter-Divisional Management Team, each Head of Division is to be identified as the leader for the component related to his/her duties. Heads of Division, jointly with the Deputy Programme Coordinators, will be engaged in such task as monitoring progress indicators; conducting on-going evaluation of project strategies; planning stakeholders, technical assistance and training workshops; supporting the school-based management and community participation approach of the project, etc.

3. Each MOE line division, through its head, will be required to plan its organizational structure for the delivery of tasks/activities associated with the Project. Together with the Deputy Programme Coordinator responsible for a particular component, each Head of Division, or responsible representative of the division, will draft the operational manual detailing procedures specific to implementing the subcomponent within their portforlio. In addition, Heads of Division will be required to develop and adjust yearly the implementation plan for each subcomponent.

4. The proposed strategy ensures that throughout the life of the project, it remains prominently a part of the regular schedule of the Ministry of Education. Therefore, Heads of Division will be required to report on activities of the project at regular Ministry of Education Heads of Division meetings. In addition to oral reports, monthly written reports will be presented according to an agreed upon format.

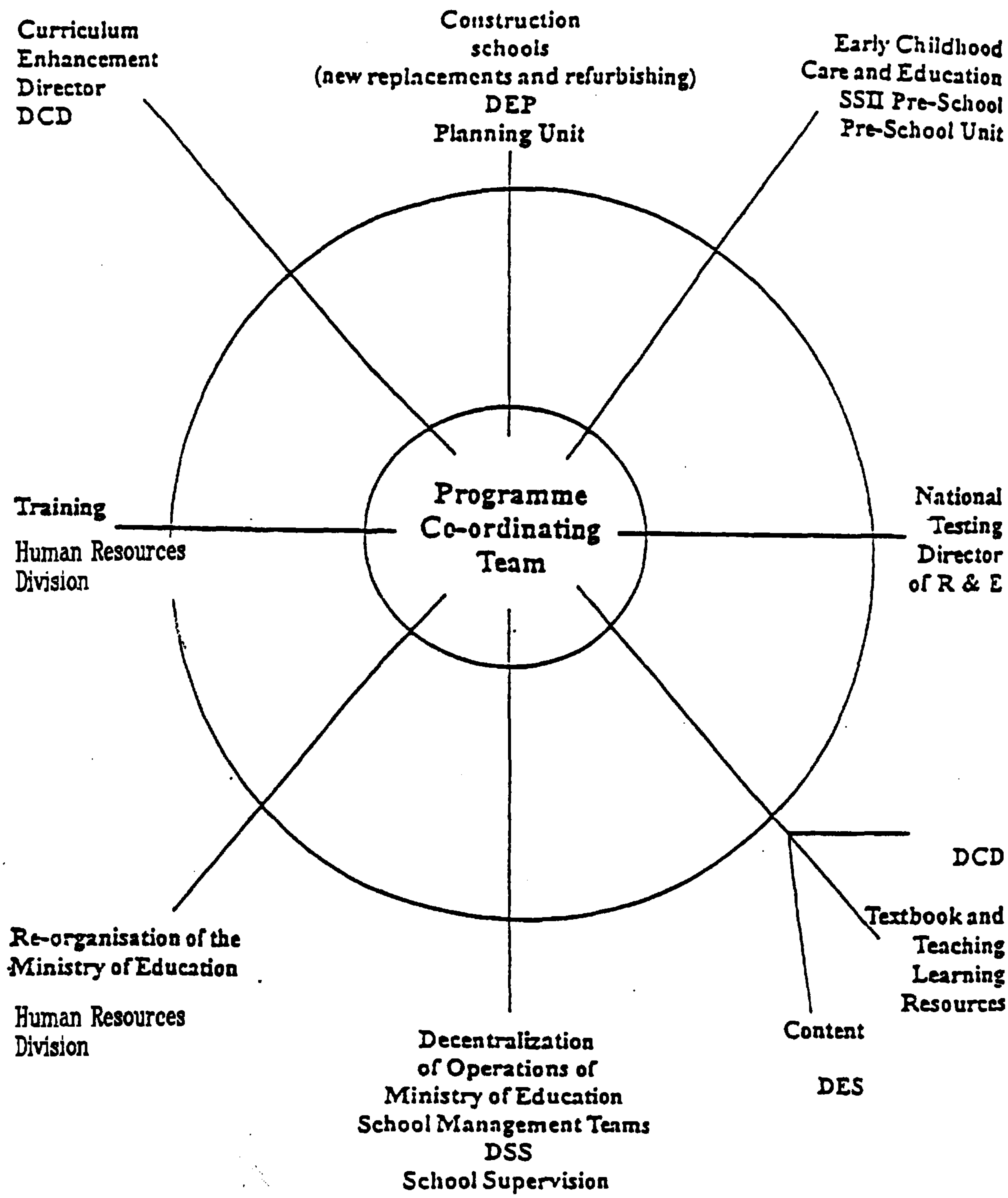
PCU FUNCTIONAL AND STRUCTURAL ORGANIZATION



**** BASED AT OFFICES OF RELEVANT HEADS OF DIVISION
*** HIRED ON THE BASIS OF ADVERTISEMENT:
MANAGEMENT/PRIVATE SECTOR
ESPRESSLY TRANSFER TECHNOLOGY
EXPERIENCE WITH WORLD BANK
** OUT CONTRACTS:
CONSTRUCTION MANAGEMENT FIRM
PROCUREMENT AGENCY

ANNEX E

MOE Inter-Divisional Project Management Committee



7-Year Implementation Plan

	1996	1997	1998	1999	2000	2001	2002
Increasing ECCE Quality							
Staff Development System							
Technical Assistance Workshops	39%	39%	4%	4%	4%	4%	4%
Training of Trainers Workshops	42%	42%	17%	-	-	-	-
Regional Certification Workshops	33%	33%	33%	-	-	-	-
Renovation of ECCE Centers	5%	10%	25%	25%	20%	10%	5%
Establishing of NCECCE Secretariat							
Establishment of NCECCE and Technical Support	31%	23%	15%			-	-
Furnish, Equip and Set Up NCECCE Office	100%						
Impact Evaluation and Follow Up Studies				75%	25%		
Increasing ECCE Access							
Construction of New ECCE Centers	20%	20%	20%	20%	20%		
ECCE Pre-Service Training	20%	20%	20%	20%	20%		
Support Increased Govt. Transfers to ECCE NGOs	6%	12%	18%	27%	37%		
Class Instruction and Curriculum Strengthening							
Staff Development System							
Technical/TOT Worshops (for 7 Training Cycles)	14%	14%	14%	14%	14%	14%	14%
Regional Training Workshops (7 Training Cycles)	14%	14%	14%	14%	14%	14%	14%
Course Design Support for Teacher Colleges	14%	14%	14%	14%	14%	14%	14%
Establish School-Based Training	6%	9%	14%	17%	17%	17%	20%
Aesthetics (Arts and Craft, Drama and Music) Introduction							
Aesthetics Training Cycle		50%	50%				
Aesthetics Course Design Support for Teacher Colleges							
Spanish Language Pilot							
Spanish Language Pilot							
Spanish Course for Teachers	17%	33%	33%	17%			
Design Pilot Strategy and Technical Support			70%	20%	10%		
Provision of Instructional Materials for Schools				50%	50%		
Spanish Course Design Course for Teacher Colleges				50%	50%		
Instructional Materials				100	100		
B.Ed. Scholarships	14%	14%	14%	14%	14%	14%	14%
Community and Stakeholders Information Campaigns	14%	14%	14%	14%	14%	14%	14%
Place Additional Facilitators (2 Per Region) -- Recurrent	100%						
Textbooks and Instructional Materials							
Select, Purchase and Deliver Textbooks							
Provide textbooks for Infant I-Standard V		40%	10%		40%	10%	
Provide Reading Books for Infants 1-Standard V		40%	10%		40%	10%	
Provide Teacher Reference Books		50%			50%		
Instructional Materials Fund							
Provide Schools with Didactic Materials	5%	10%	25%	25%	20%	10%	5%
Provide Miscellaneous Equipment for schools	5%	10%	25%	25%	20%	10%	5%
Provide Teachers Colleges with Didactic Materials	5%	10%	25%	25%	20%	10%	5%
Provide Didactic Materials for LRC	5%	10%	25%	25%	20%	10%	5%
Provide Materials and Assistance School Broadcasting	5%	10%	25%	25%	20%	10%	5%
Furnish and Equip Teacher Resource Room	30%	40%	30%				
Implement Computer In-School Program	5%	10%	25%	25%	20%	10%	5%
Local Development of Instructional Materials							
Study of Local Production of Printed Materials		29%	43%	29%			
Training for Local Development of Instructional Materials			20%	20%	20%	20%	20%
Select and Hire Textbook Officer - Recurrent	100%						
Civil Works							
Design and Supervision	17%	18%	21%	18%	18%	5%	2%
Construction of New and Rebuilt Schools	1%	24%	21%	21%	20%	11%	2%
Renovations and Extensions	6%	1%	20%	18%	13%	32%	10%
Secondary Schools							
Cost-effective Designs	50%	50%					
Construction		54%	30%	16%			
Management Decentralization							
MOE Reform							
Analize Organization and Functions	100%						
Develop Decentralization Plan	50%	50%					
MOE Divisions Prepare Plans and implement Strategy	5%	10%	25%	25%	20%	10%	5%
Regional Divisions Prepare Plans and Implement Strate	5%	10%	25%	25%	20%	10%	5%
Establish and Fully Staff PCU -- recurrent	100%						
Monitoring and National Student Assessment System							
Development of Testing and Assessment Strategic Plan	100%						
Install Computer-Based Test Development System	90%	10%					
Provision of Technical Assistance cum Training	36%	36%	9%	9%	10%		
Select and Hire Additional Technical Staff	100%						
School-Based Management (SBM) Strengthening							
SBM Program Development and Training							
Establish the SBM Program	100%						
Develop and Distribute Manuals and Other Materials	30%	30%	20%	10%	10%		
Provide Technical Support to each Region	10%	30%	20%	20%	10%	5%	5%
Provide Technical Support and Training to Schools	10%	30%	20%	20%	10%	5%	5%
Initiate SBMP Operations and Financing of SIPs	5%	10%	25%	25%	20%	10%	5%
Community and Stakeholders Information Campaign	30%	30%	8%	8%	8%	8%	8%

SUPERVISION PLAN

Supervision (tentative dates)	Activities	Proposed Mission Team	Length of Mission
(January 1996) #1 Project Launch	Training in Bank-accepted accounting, filing and audit procedures. Bank disbursement and reporting, and program monitoring and evaluation methods.	• Task Manager • Accounting and Audit Specialist • Monitoring and Evaluation Specialist • Architect	2 Weeks Mission (9 staff weeks)
(June 1996) #2	Discussions and agreements on (i) experience during the first 6 months of implementation and (ii) the proposed budget for the following year.	• Task Manager • Curriculum Specialist • Community Participation Specialist	2 Weeks Mission (7 staff weeks)
(Nov. 1996) #3	End of first year mission to review (i) project implementation during the first year of operations, especially the components with high community participation (through stakeholder workshops); (ii) agree on any follow-up needs/adjustments if any; and (iii) review end-of year audit requirements.	• Task Manager • Community Participation Specialist • Accounting and Audit Specialist	2 Weeks Mission (7 staff weeks)
(March 1997) #4	Review of (i) completion of the first year of training cycle and B.Ed program for ECCE and primary school teachers and principals; and (ii) financial and audit requirements of the project during the first fiscal year during implementation.	• Task Manager • Staff-Development Specialist	2 Weeks Mission (5 staff weeks)
(July 1997) #5	**Mid-Year Review to:** (i) review financial, operational and impact progress summaries of all project components to be prepared by PCU prior to the mission; (ii) analyze previous' year's financial and operational performance; (iii) analyze and agree on the proposed work plan and budget for the following fiscal year; and (iv) discuss and agree on any revisions to the project implementation manual, including the ECCE, SBM and decentralization programs.	• Task Manager • Curriculum and Training Expert • Architect	2 Weeks Mission (7 staff weeks)
(Dec. 1997) #5	**End-of Year Mission to:** (i) monitor and review randomly selected contracts without prior Bank Review; (ii) conduct stakeholder workshops (with principals, teachers, and parents) to (a) review availability of project inputs at start of academic year; (b) receive feedback on progress, impact and satisfaction related to the community participation components; and (b) monitor operations of the SBM and ECCE Programs, including random post review of approved subprojects.	• Task Manager • Monitoring and Evaluation Specialist • Community Participation Specialist	2 Weeks Mission (7 staff weeks)

(July 1998) #6	**Mid-Year Review Mission** (see TOR above)	Same	Same
(Dec. 1998) #7	**End of Year Review Mission** (see TOR above)	Same	Same
(July 1999) #8	**Mid-Term Evaluation:** The Government and the Bank will evaluate project's impact on (i) primary school effectiveness; (ii) operation of ECCE centers; (iii) training of ECCE and primary school teachers; (iii) availability, quality and use of instructional materials; and achievement of development objectives in the decentralization and SBM programs. Base line data would be provided by the ECCE survey, the textbooks and instructional materials survey and the results of prior monitoring of school effectiveness indicators. In addition the regular financial and operational review of mid-year reviews would be conducted (see TOR before mentioned).	• Task Manager • ECCE Specialist • Staff Development Specialist • School-Based Management Specialist • Instructional Materials Survey • Financial Management Specialist	2 Weeks Mission (18 staff weeks)
(Dec. 1999) #9	**End of Year Review Mission** (see TOR above)	Same	Same
(June 2000) #10	**Mid-Year Review Mission** (see TOR above)	Same	Same
(Dec. 2000) #11	**End of Year Review Mission** (see TOR above)	Same	Same
(June 2001) #12	**Mid-Year Review Mission** (see TOR above)	Same	Same
(Dec. 2001) #13	**End of Year Review Mission** (see TOR above)	Same	Same
(June 2002) #14	**End of Project Mission:** Discussion and agreements related to the project completion report, sustainability plan, and projected timetable.	• Task Manager • Monitoring and Evaluation Specialist	2 Weeks Mission (5 staff weeks)
Dec. 2002 #15	**Loan Closing Mission:** Review of completion report. Discussion of final disbursements and loan closing.	• Task Manager	1 Week Mission (1.5 staff week)

ANNEX G: PROJECT MONITORING AND EVALUATION

- **Beneficiary-Centered Monitoring System and Indicators**
- **Impact Evaluation Indicators**

Objective

To ensure that the project is achieving its objectives in a timely and efficient manner and that relevant information is available to adjust processes, strategies and use of resources during the implementation of the project and for future investments. Monitoring and evaluation is the learning system of the project.

Outputs

- An effective control system for continuous tracking progress, effectiveness and efficiency in achieving expected outputs in civil works, training, provision of instructional materials, improvement plans and other key activities.

- A client-centered monitoring and evaluation system considers beneficiaries' satisfaction, opinions and perceptions as major indicators of project success.

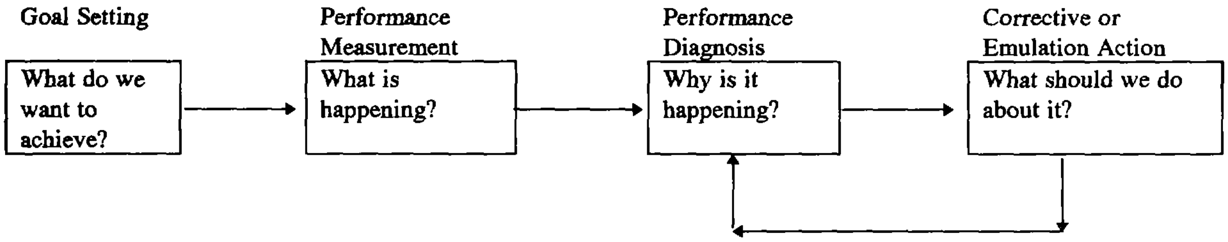
- A continuous monitoring system of improvements in school effectiveness through behavioral indicators at the school and community level.

- A mid-term review which will evaluate the impact on the project against the indicators here proposed and the baseline data provide by the ECCE and Instructional Materials surveys conducted during project preparation.

Beneficiary--Centered Monitoring System

1. The monitoring system will be an intrinsic part of project planning and implementation as each programmed annual activity will include indicators for goal setting, performance measurement, performance diagnosis and corrective (if below expectations) or emulation action (if exceeds expectations).

The Monitoring Process



Monitoring Indicators

2. For each programmed activity, the EPCU, with support from project beneficiaries and the respective MOE divisions, will set four types of indicators: Number of Beneficiaries and Goods/Services to be Provided, Beneficiary Satisfaction, Cost, and Time. The first two indicators measure effectiveness, the last two efficiency.

3. **Number of Beneficiaries.** Per each activity, the first indicator will include, both the number of beneficiaries and the number of goods and/or services delivered (e.g., "10,000 textbooks distributed in 100 schools to 500 children" or "10 days of training/technical assistance provided to 20 teachers/MOE staff, etc.").

4. Measurement of actual numbers of beneficiaries and delivered goods and services would be provided by delivery receipts of goods and services, enrollment and attendance sheets, inspection reports, construction completion reports, etc..

5. **Beneficiary Satisfaction and Behavior Change Indicators.** Participatory-centered projects recognize that beneficiary satisfaction and positive behavior changes should be major indicators of project success. To keep this goal at the forefront of project implementation, it is important to establish a system for tracking beneficiaries' satisfaction and behavioral change as part of the day-to-day control system. Satisfaction is the state felt by the beneficiary or end-user who has experienced a performance (or outcome) that has fulfilled his or her expectations. If project activities and results exceed beneficiaries' expectations, the person is highly satisfied; if they match the expectation, the person in satisfied; if the results fall short of the expectations, the person is dissatisfied. Behavioral indicators are those perceived changes in beneficiaries actions, comments and beliefs which are impacted by project inputs and incentives. In education projects, behavior indicators at the classroom level can track positive changes in school effectiveness.

6. Beneficiary satisfaction and positive behavior change, in spite of its central importance, is difficult to measure. Nevertheless, the following methods have been used, and would be used as part of the project to infer how much beneficiary satisfaction and positive actions and motivation the project is creating: regular focus groups, stakeholder workshops, supervisors' visits, classroom observation, simple surveys and suggestion boxes.

7. ***Costs*** . The first efficiency indicator will compare budgeted amounts to actual expenditures. In addition, planned to actual costs per beneficiary will be assessed by comparing respectively budgeted and expensed amounts with planned and actual number of beneficiaries (first indicator above). Tools for assessment and tracking of costs will include the project accounting system and reporting, the project costs and disbursement sheets (see Procurement and Disbursements Annex) and the CosTab-created project costs and budgets, which have been structured to be used during implementation of the project.

8. **Time.** The second efficiency indicator will be planned and actual time of (i) approval and other internal processes, (ii) procurement, (iii) disbursement, and (iv) delivery to **end-user** (e.g., instructional materials in teachers' classrooms, **not** in storage warehouses).

9. Tool for assessment and tracking would include: (i) for approval processes, communication memorandums, flow charts with planned and actual response time, and interviews and focus groups with actors across the approval hierarchy; (ii) for procurement, dates in communication memorandum among procurement actors, and recorded times of TORs development, advertisement, bid opening, contract awarding, etc.; (iii) for disbursement, recorded times of financial resources transfers from the various responsible agencies (World Bank, Central Bank, Ministry of Finance, MOE Finance Division and EPCU to contractors -- or beneficiaries in cases of decentralized procurement); and (iv) for delivery to end-user, time annotation in end-user-receipts upon receiving goods/services, and other simple ex-post surveys.

10. **Performance Diagnosis and Action Plan.** The EPCU will coordinate as part of its management activities, no later than once a year, a monitoring and evaluation workshops with key stakeholders. The goal of the workshops would be to (i) assess the effectiveness and efficiency of project implementation so far; (ii) diagnose through a participatory approach the probable causes of delays and/or unexpected benefits (caused, for example, by implementation innovations); and (ii) detail a follow up plan for correcting any identified problems and/or emulating a successful strategy. Minutes from these workshops and other monitoring documentation would be available during Bank supervisions, annual progress reports and the mid-term evaluation

Sample of Monitoring Matrix

Activity	Indicators	Planned	Tracking and Assessment Tools	Actual	% change	Why?	Corrective or Emulative Action
ECCE	**1.1 Number of Beneficiaries**	• 70 Trainees in 40 ECCE Centers in 8 Regions	• Enrollment Sheets • Attendance Sheets	__ Trainees in • __ ECCE Centers in Regions			
Upgrading Quality **1.1 In-Service Training Program**	**1.2 Number of Goods/Services**	• 1 Int'l expert/6 days • 16 Nat'l Trainers/20 days each • 2-weeks workshops in each of 8 regions	• Contracts • Completion Reports	• __ Int'l expert/__ days • ___ Nat'l Trainers/__ days each • ___-weeks workshops in each of __ regions			
Start: March 1/96 **Finish:** May 1/'96	**1.3 Beneficiaries' Satisfaction and Expected Behavior Changes**	• Satisfaction is expected as evidenced by the application of training concepts in the classroom by ECCE teachers **(see attached list of sample classroom level, behavior-based indicators)**	• Workshop evaluations by Trainees • In-School Follow-up • Supervisors Reports	• Highly Satisfied • Satisfied • Dissatisfied			
	1.4 Costs Services: Goods:	• Int'l expert: US$700/day • Nat'l Trainer TT$500/week • Workshop Incidentals: TT$1000 per workshop	• Disbursement and Payment Records	• Int'l expert: US$___/day • Nat'l Trainer TT$___/week • Workshop Incidentals: TT$____ per workshop			
	1.5 Time: Approval Procurement: Disbursement Delivery	• PS: One day • CEO: One day • NCECCE: Three days Services Identification and Negotiation: 3 Weeks Awarding Contract: 1 Week Request for payment: 1 day Payment from Special Account: 1 day Technical Assistance Workshop: One Week All Workshops completed in 8 Regions by May 1st, 1996	• Dated Minutes, Memorandums and other Correspondence • Dates in payment request and actual disbursement reports • Dated receipts from end-users • • Attendance Sheets	• PS: ___ day(s) • CEO: ___ day(s) • NCECCE: __ days Services Identification and Negotiation: ___Weeks Award Contract:__ Week Request for payment: ____day(s) Payment from Special Account: ___ day(s) Technical Assistance Workshop: ____Week ____Workshops completed in ___ Regions by			

Sample of Classroom and School Level Behavior-Based Indicators to Assess Improvements in School Effectiveness

Component	Goal	This is Evidenced by:
ECCE	• Teachers are more efficient in their delivery of ECCE.	• Ability to converse with ECCE supervisors on issues related to the appropriate ECCE curriculum at each stage of child development; • The ECCE teacher develops lesson plans and objectives based on his/her pupils' emotional, physical, intellectual and social characteristics; • Teacher uses a variety of teaching approaches and instructional resources and materials; • Classroom activities planned by the teacher are evident of a holistic method including creative use of language, physical activities, playing materials, and art and music instruments. • The teacher is able to explain the assessment methods he/she has learned and applies in determining the individual needs of his/her children. • During regular supervision visits, ECCE facilitators can see the results (planned activities, interviews with parents, visit on-going PTA meetings) of more frequent parent-teacher relations.
Classroom Instruction and Curriculum Strengthening	• A well functioning staff development program to improve the quality of classroom instruction and evaluation techniques by enhancing the professional and technical skills and abilities of principals and teachers.	• The teacher uses a variety of instructional strategies making better use of space, student collaboration, innovating instructional materials, and cross-references among curriculum subjects (arts and craft, culture, language arts, music, math, foreign languages, etc.) • The teacher spends more time with his/her students outside of the classroom and children are more eager to help and participate in school activities. • The teacher uses a variety of evaluation techniques (including self-prepared tests) and can discuss with his/her principal and supervisors the remedial support being provided to each of his/her students. • Principals visit classrooms regularly and can discuss with school supervisors specific needs of each of their teachers and classrooms.
Instructional Materials	• To enhance preparation of instructional materials by teachers for use in their own classrooms	• Supervisors visiting schools would see teachers using a variety of self-prepared instructional materials such as posters, hand-outs, computer-generated figures, weekly tests, etc. • Principals provide time for their teachers to meet and discuss preparation of creative instructional materials and to share experiences. • Supervisors visiting schools would see how teachers complement the textbooks and reading books provided by the project with self-prepared instructional materials.

Component	Goals	This evidenced by
Facilities Construction and Upgrading	• Improved facilities, classroom space and flexible furniture	• Principals and teachers would provide the MOE recommendations on the most appropriate design of furniture for their classrooms; • Visitors to the schools would see teachers regularly re-arranging classroom furniture to support a variety of teaching methods. • Principals and teachers would invite school supervisors to regular school-community extra-curricular and social activities, which would promote better community support in maintaining and safe-guarding the school premises and resources. • Teachers would spend more time in school premises due to the availability of appropriate and comfortable staff rooms. • Principals, teachers and parents would provide comments on the physical conditions of the school in writing to the regional office and PCU.
Testing and Assessment Reform	• A well functioning feedback system on student achievement for school principals and teachers	• Teachers can explain the content and rationale for the national assessments in standard I and III; • Teachers can interpret the feedback on the national assessment provided by the MOE and can explain the follow-up activities they have implemented in their classrooms, including remedial programs for their students; • Teachers provide continuous feedback on the national assessments and suggest changes to or recommend test items.
School Based Management	• Increased involvement of principals, students, parents and community groups in the planning and implementation of school improvements.	• Supervisors are invited to planning sessions with school staff, parents and other community representatives; • Schools and communities provide comments in writing to their regional offices and PCU on the outcomes of the School-Based Management Program; • Teachers invite parents to support them in school activities and in the classroom. • During school visits, supervisors find parents helping in the school.

PROJECT GOALS AND OUTPUT-BASED IMPACT INDICATORS

11. Additionally, the project would conduct annual, midterm and end of project impact evaluations. The PCU would coordinate the compile of information on the following list of impact indicators at the project, component and subcomponent levels, which would provide the necessary base-line and comparison data to assess outcome-based project impact during implementation.

Project	Goal	Impact Indicators
Basic Education Project	• Increased learning and social development of children in ECCE centers and primary schools, especially of those from low-income groups	• CEE scores average increased, especially in high and medium-risk schools • Less number of students are placed in post-primary courses • Standard I and III exams show improvements in learning during the early school years • Surveys of parents and teachers concur that children's behavior and self-esteem has improved

Components	Goal	Impact Indicators
ECCE	• Enhanced cognitive and social development of children in ECCE to enter primary education.	• Standard I National Assessments reflect increased student learning attainment • Enrollment statistics reflect greater access to ECCE services from low income groups
Teaching and Learning Quality	• Improved quality of teaching (instruction, assessment and curriculum) and learning (academic achievement) in primary schools.	• Standard III and V National Assessments reflect increased student learning attainment
Upgrading the Physical Environment	• Improved physical settings for teaching and learning; and • Developed cost-effective strategies to increase access of primary education graduates to the secondary level	• Enrollment statistics reflect greater access to primary and secondary levels • Surveys of principals, teachers and students concur that physical facilities, equipment and furniture have improved
Education Management Strengthening	• Enhanced efficiency of delivery and use of educational goods and services by regional, school and community beneficiaries.	• Surveys reflect positive comments from regional divisions, as recipients of MOE services; from schools, as recipients of regional services; and from parents, as recipients of schools services. • Delivery time and frequency of services improved across all levels in the education system.

Subcomponents	Goal	Impact Indicators
ECCE: Upgrading Quality	• Improved quality of delivery of ECCE Programs • Improved quality of ECCE Existing Curriculum • Enhanced working conditions of teachers employed at public ECCE centers • Improved physical conditions of ECCE centers.	• Increased understanding and application by ECCE teachers of ECCE development curriculum and pedagogical approaches • Evident language, cognitive, emotional, social and sensory-motor development of children in ECCE centers • Greater uniformity in the delivery and supervision of the ECCE curriculum in public and private centers • Enforced minimum standards for the operation of ECCE services and teacher qualifications • Post ECCE pupils are better prepared to cope with the academic and social demands of primary education
ECCE: Increasing Access	• Accessible ECCE services particularly to those from low income families • Strengthened community and parental support • Improved ECCE sector management, organization and collaboration	• Sustained increase in the student population pursuing ECCE programs • Greater enrollment at ECCE centers by pupils from low income families • Greater pool of teachers qualified to deliver ECCE programs • More frequent parent-teacher conferences • Regular collaboration among ECCE Government agencies and NGOs under the auspices of the NCECCE
Classroom Instruction and Curriculum Strengthening	• A well-functioning staff development system • Improved classroom instruction and evaluation techniques • Improved in-school and inter-school coaching and support • Strengthened school leadership and regional support	• Evidenced by a Comprehensive Evaluation of Classroom and School level Behavior-Based Indicators Monitored During Project Implementation.

Subcomponents	Goals	Indicators
Textbooks and Instructional Materials	• Reduced cost of education for needy families • Enhanced preparation of instructional materials by teachers	• Survey concur that needy schools have appropriate curriculum and textbooks • Larger number of teacher-prepared materials used in class
Facilities Construction and Upgrading	• Increased access to education for increasing student population in primary and secondary schools • Improved facilities, classroom space and flexible furniture	• A reduction in overcrowding in primary schools • An increase in the number of primary school pupils placed in government secondary schools • Reduction in school disruptions due to inadequate school facilities, furniture and equipment
Management Decentralization	• A developed and implemented plan for MOE functional and structural reorganization • Improved MOE, regional and school services	• A reduction in bottlenecks and red tape in operations across all levels in the system • Through a survey, personnel at all levels concur that their job satisfaction has increased • Faster decision-making and faster execution of decisions taken
Testing and Assessment Reform	• Enhanced MOE capacity for research, strategic planning and monitoring and evaluation • An improved system of recording and retrieving data on assessment instruments and students performance • A well functioning feedback system on student achievement for policy makers, education managers and supervisors, and school principals and teachers	• Increased number of evaluation assessments undertaken by the DRE • An increase in the number of teachers skilled in test construction and test analysis • The use of a wide variety of assessment strategies by teachers • Through surveys, principals, teachers and parents concur that feedback from DRE-developed national assessments was beneficial
School Based Management	• Increased involvement of principals, students, parents and community groups in the planning and implementation of small subprojects designed to improve their schools	• Principals concurred that they have greater autonomy in the management and operations of their schools and relations with supervisors have improved • A greater number of schools raise, plan and manage their own resources • Community members concurred relations with school have improved as evidenced by regular assemblies and parents' involvement in school activities

ANNEX H: PROCUREMENT AND DISBURSEMENTS

- Procurement Methods by Categories, Contract Amounts and Maximum Aggregated Amount Thresholds, and Bank Review Thresholds
- Implementation Budget by Subcomponent and Expenditure, Disbursement and Legal Accounts
- IBRD Loan Amounts and Allocations
- Project Counterpart Investment Funds and Allocations

Objective

To ensure an efficient and timely system for providing goods and services to support the implementation of the development objectives of the project, while generating effective information on project financial and procurement operations.

Outputs

- A table of project procurement methods and thresholds adapted to the community-based and participatory approach of the project which emphasizes competitiveness, effectiveness and timely delivery of goods and services.

- A simple matrix tied to the CosTab generated project budget tables and project subcomponents which would facilitate tracking the use and allocation of loan proceedings and Government counterpart funds.

PROCUREMENT METHODS AND THRESHOLDS FOR USE AND PRIOR BANK REVIEW

Category	Procurement Method	Method Threshold US$'000 (> contracts greater than/< less than)	Aggregated Maximums US$	% of Category	Prior World Bank Review Threshold (f) US$ '000	World Bank Expost Review
Civil Works	ICB	> 3,000	(37 million)	75	All	n/a
	NCB	250 - 3000	10 million	20	First One ea.Year	Random
	Shopping	< 250	3 million	5	No	Random
Goods	ICB (c)	> 250	7.1 million	51	All	n/a
	LIB (d)	> 250	2 million	13	All	Random
	NCB (e)	> 50	1.5 million	11	First One ea.Year	Random
	Shopping	< 50	4 million	30	No	Random
Consultant Services (a)	Bank Guidelines	All Firms	5.1 million	90	< 50	Random
		All Individuals	600,000	10	< 5	Random
Subprojects (b) (Works and Goods)	ECCE Proposal	< 15	1.5 million	100	No	Random
	School Impv. Plans	< 7	7.5	100	No	Random
Non-Bank Financed	Works Design and Supervision	n/a	5.5 million	n/a	n/a	n/a
	Classroom Furniture	n/a	4.5 million	n/a	n/a	n/a
	School-Based Training Funds	n/a	2.3 million	n/a	n/a	n/a

(a) Int'l and nat'l experts to provide technical assistance, training or other services will be hired in accordance with the Bank Guidelines for Consultants

(b) Procurement procedures will be detailed in the operation manuals. Direct contracting may be used only in rural areas when 2-3 quotes are not available, up to a previously stipulated maximum (explanation and documentation must be kept in the respective subproject files)

(c) Mainly for Procurement of Textbooks which will use a Two-Step ICB

(d) LIB among major international computer suppliers who have services facilities in Trinidad and Tobago

(e) Mainly for procurement of reading books from Caribbean authors.

(f) Where no ex-ante WB review applies, the GoRTT alone will ensure procurement guidelines, competitive prices, quality and delivery capacity.

IMPLEMENTATION BUDGET
BY EXPENDITURE AND DISBURSEMENT CATEGORIES
AND SUBCOMPONENTS

US$ '000			ECCE		Improving Teaching & Learning		Upgrading the Physical Environment			Education Management Strengthening		
		Subcomponent:	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3
		Costab Table:	#1	#2	#3	#4	#5-12	#5-12	#13	#14	#15	#16
LEGAL ACCOUNTS (Schedule 1)	DISBURSEMENT ACCOUNTS	EXPENDITURE ACCOUNTS	Increasing Quality	Increasing Access	Instruction and Curriculum	Textbooks and Instruct'nl Materials	New & Rebuilt Schools	Upgrading Existing Schools	New Secondary Schools	Managmt. Decentraliztn.	Reform Evaluation and Assessment	School-Based Managmt.
CIVIL WORKS	Construction	New		$2,260			$27,335					
		Renovation	$225					$9,825			$10	
	Design and Supervision	Same		$25			$3,225	$1,165				
	Secondary Schools	Construction							$9,600			
		Design/Supervision							$1,100			
		Furniture							$680			
		Equipment							$480			
GOODS	Instructional Materials	Textbooks & Reading Books				$8,400						
		Other Instructional Materials	$75		$400	$1,000						$25
	Equipment	Computer Hard and Software	$5			$1,450				$40	$275	
		Other Equipment	$160	$80		$600				$40	$30	
	Furniture	Classroom					$4,015					
		Office and ECCE	$550	$230		$355				$55	$10	
SERVICES	Training	By Int'l Experts	$190			$45				$90	$90	
		By Nat'l Experts	$20		$105	$20				$200		$400
		Local Scholarships		$260	$1,885					$30	$80	
	Technical Assistance	Intn'l Experts	$465		$345	$130			$50	$200	$155	$40
		Nat'l Experts	$45		$225				$15	$300	$30	$200
	Promotion	Nat'l Experts			$125							$130
MISCELLANEOUS	Improvement Subprojects	SIPs										$7,500
		Regional Decentralization Plans								$2,000		
		MOE Reform Plans								$500		
		Training Grants			$2,000							
	Recurrent Costs	ECCE NGOs		$1,615								
		NCEEC	$490									
		Regional Staff			$530							
		MOE Staff				$20					$325	
		PCU								$885		
TOTAL BUDGET	$95,460		$2,225	$4,470	$5,615	$12,020	$34,575	$10,990	$11,925	$4,340	$1,005	$8,295
TAXES	$10,366		$255	$475	$251	$366	$5,186	$1,649	$1,782	$240	$140	$23
NET OUTFLOWS	$85,094											

* Due to rounding the numbers may not add up

* Does not include recurrent costs directly incurred to the MOE budget

IBRD LOAN: US$50,957		US$ '000	ECCE		Improving Teaching & Learning		Upgrading the Physical Environment			Education Management Strengthening		
		Subcomponent:	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3
		Costab Table:	#1	#2	#3	#4	#5-12	#5-12	#13	#14	#15	#16
LEGAL ACCOUNTS Schedule 1 Loan Amounts Allocated (Unallocated)	DISBURSEMENT ACCOUNTS (IBRD Loan Amounts)	EXPENDITURE ACCOUNTS	Increasing Quality	Increasing Access	Instruction and Curriculum	Textbooks and Instruct'nl Materials	New & Rebuilt Schools	Upgrading Existing Schools	New Secondary Schools	Managmt. Decentraliztn.	Reform Evaluation and Assessment	School-Based Managmt.
CIVIL WORKS $18,700 ($1,950)	Construction $16,165	New 12,135										
		Renovation 4,030										
	Design and Supervision NBF	**Government**										
	Secondary Schools $4,483	Construction 4,000										
		Design/Supervision **NBF**										
		Office Furniture 83										
		Equipment 400										
GOODS $11,000 ($1,300)	Instructional Materials $10,000	Textbooks & Reading Books 8,630										
		Other Instructional Materials 1,370										
	Equipment $2,000	Computer Hard and Software 1,475										
		Other Equipment 525,000										
	Furniture $300	Classroom **Government**										
		Office 300										
SERVICES $5,700	Training $3,000	By Int'l Experts 420										
		By Nat'l Experts 330										
		Local Scholarships 2250										
	Technical Assistance $2,400	Intn'l Experts 1400										
		Nat'l Experts 1000										
	Promotion	Nat'l Experts 300										
Subprojects $10,900	Improvement Subprojects $10,704	Schools $7,500										
		Regional Offices $1600										
		MOE Divisions $400										
		ECCE Proposals 1400										
Recurrent Costs $1,400	Recurrent Costs $1,400	ECCE NGOs $575										
		NCEEC $205										
		Regional Staff $220										
		MOE Staff $150										
		PCU $250										

GORTT: Public Sector Investment Programme (PSIP)	US$ '000		ECCE		Improving Teaching & Learning		Upgrading the Physical Environment			Education Management Strengthening		
		Subcomponent:	A1	A2	B1	B2	C1	C2	C3	D1	D2	D3
		Costab Table:	#1	#2	#3	#4	#5-12	#6-12	#13	#14	#15	#16
Counterpart: (plus taxes):	US$ 34,273 (US$10,366) DISBURSEMENT ACCOUNTS	EXPENDITURE ACCOUNTS	Increasing Quality	Increasing Access	Instruction and Curriculum	Textbooks and Instruct'nl Materials	New & Rebuilt Schools	Upgrading Existing Schools	New Secondary Schools	Managmt. Decentraliztn.	Reform Evaluation and Assessment	School-Based Managmt.
CIVIL WORKS $35,110 ($8,350)	Construction $23,260 ($5,915)	New $17,460 ($4,440)										
		Renovation $5800 ($1,475)										
	Design and Supervision $4,415 ($662)	Same $4,415 ($662)										
	Secondary Schools 7434 ($1,770)	Construction $5671 ($1,442)										
		Design/Supervision $1105 ($166)										
		Class Furniture $586 (90)										
		Equipment $72 (72)										
GOODS $5,617 ($1,274)	Instructional Materials $70 ($70)	Textbooks & Reading Books										
		Other Instructional Materials $70 ($70)										
	Equipment $355 ($355)	Computer Hard and Software $260 ($260)										
		Other Equipment $95 ($95)										
	Furniture $4,077 ($664)	Classroom $4,015 ($602)										
		Office $62 ($62)										

SERVICES $0 $0	Training $0 $0	By Int'l Experts $0 ($0)										
		By Nat'l Experts $0 ($0)										
		Local Scholarships $0 ($0)										
	Technical Assistance $0 ($0)	Intn'l Experts $0 ($0)										
		Nat'l Experts $0 ($0)										
	Promotion	Nat'l Experts $0 ($0)										
Subprojects (School-Based Training Grants) $2,260	Improvement Subprojects $2,260	Schools $0										
		Regional Offices $0										
		MOE Divisions $0										
		ECCE Proposals $0										
		School-Based Training Grants 2,260										
Recurrent and Operating Costs $2,514 ($697)	Recurrent Costs $2,514 ($697)	ECCE NGOs $1,090 ($35)										
		NCEEC $286 ($162)										
		Regional Staff $305 ($173)										
		MOE Staff $196 ($99)										
		PCU $637 ($228)										

Does not include recurrent costs directly incurred to the MOE budget.

ANNEX I: BENEFICIARIES ASSESSMENT AND PARTICIPATION

- **Conceptual Framework: Factors that Determine School Effectiveness**
- **Sample Outputs from Beneficiary Assessment workshops conducted with primary school principals**
- **Sample School Planning to Improve Student Learning Outcomes**
- **Teaching and Learning Quality Logical Framework Developed through an Participatory Approach**

Objective

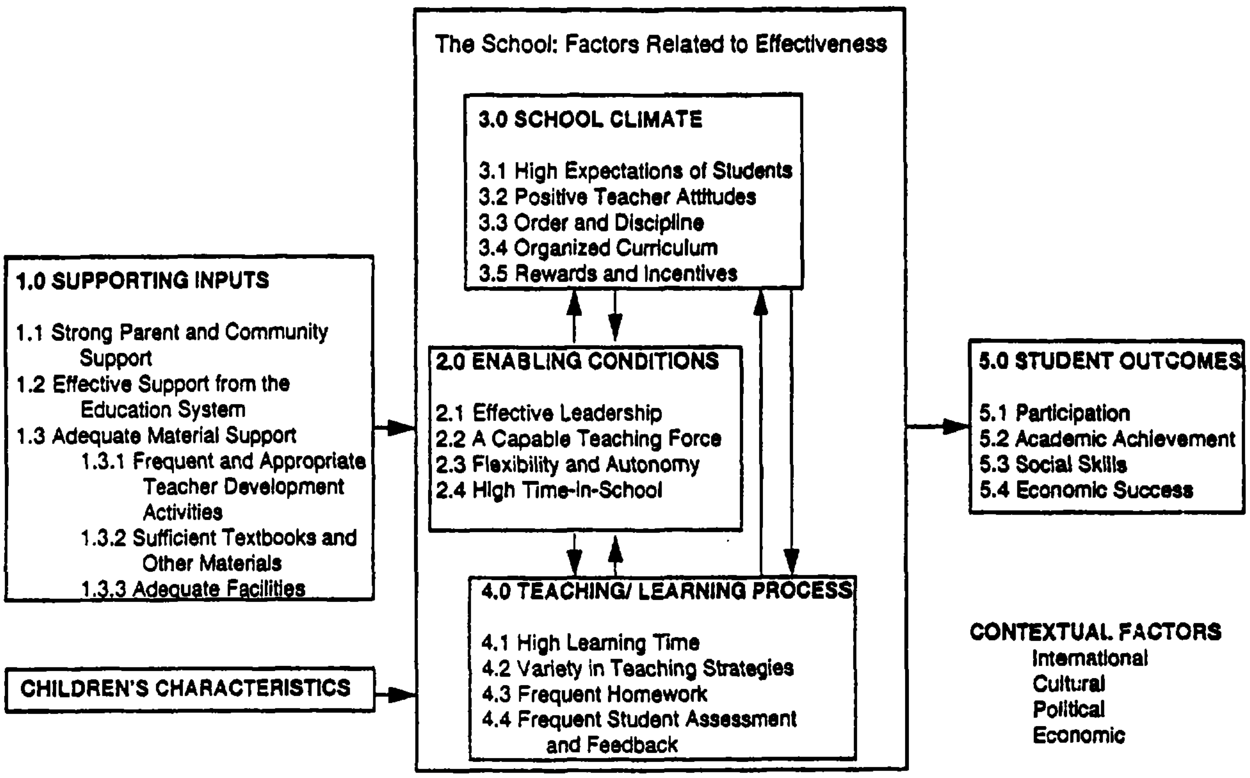
During project preparation, the MOE, the NTFE and the design team conducted a series of focus groups and stakeholder workshops to involve teachers, principals, regional staff and other education stakeholders in assessing needs and developing a strategy (purpose, outputs, activities, tasks and inputs) for project design.

Outputs

The annex presents three samples of outputs from education stakeholders workshops: (i) definition of school-based leadership and autonomy; (ii) inputs required for improving quality in the classroom; and (iii) logical framework (goal, impact, outputs, activities, inputs and verifiable indicators) for project design of the teaching and learning quality component.

The outputs of these three stakeholder workshops as presented in this annex, have been grouped within the school effectiveness conceptual framework. The school effectiveness framework consists of an interrelated network of sixteen school related factors, organized into four groups, that influence student outcomes. (see figure, next page)

Conceptual Framework: Factors That Determine School Effectiveness[1]



[1] Ward Heneveld, 1994. *Planning and Monitoring the Quality of Primary Education in Sub-Saharan Africa.* AFTHR Technical Note No. 14, Human Resources and Poverty Division, Technical Department, Africa Division.

The following are sample comments expressed by representatives of the Primary School Principals Association. Principals chose the work "emporwerment" to represent school leadership and autonomy, a key pilar of school-based management. Through an Affinity exercise (where **all** participants write their comments and answers, which are then posted on the wall, categorized and discussed) principals described school based management as: "I will be empowered in my school when...." *(Categories added for comparison with Conceptual Framework).*

Supporting Inputs)
Strong Parent and Community Support
(e.g., ".. when P.T.A. and principals can collaborate on policy matters;" "...when I receive more support from the community;" "...when I can determine the needs of the school with other stakeholders.")

Effective Support from the Education System
(e.g., "...when I can approach the authorities and give my views about matters to be implemented;" "...When authorities respect me for my worth and ability to perform.")

School Climate
Organized Curriculum
(e.g., "...when I can plan and effect curriculum suited to my environment;" "...when I can determine within reason the type of curriculum to be delivered.")

Rewards and Incentives
(e.g., " when I have a greater say in selection of staff"; "...when I am able to sit on the board or panel when dealing with staff"; "...when security of tenure is commensurate with teacher's practice.").

Enabling Conditions
Effective Leadership
(e.g., "...when I am able to manage the school -- its people and plant -- in an efficient and effective manner leading to success of our mission;" "...when I am able to make decisions relevant to situations as they arrive." "...when I have greater autonomy in running the school;" "...when I do not have to refer minor matters to my immediate supervisors for approval;" "...when I can do things in the school which I deem to be right.")

A Capable Teaching Force
(e.g., "...When there is an overall agreement with staff when decisions are taken;" "...when I can determine and challenge the performance of my staff;" "...when I can plan and execute staff development without all the red tape;" "...when I can have a say in planning strategic programs for my school.")

Flexibility and Autonomy
(e.g., "...when I have a greater say in deciding how the school finances are to be spent;" "... when I am given the financial resources to cater for my school's needs on a day-to-day basis;" "... when I have finances to disperse for well defined and organized actions/research projects;" "... when I have funds to disperse for well organized staff development seminars.").

The following are sample comments expressed by representatives of the Primary School Principals Association regarding the inputs needed to support the quality of education in their schools. Through an Affinity exercise (where all participants write their comments and answers, which are then posted on the wall, categorized and discussed) principals described the inputs necessary for quality education: "The inputs I need to produce a well-rounded basic education graduate are...":

Adequate Material Support

Teacher Development

(e.g., "...adequate training; ...more organizational skills; ...teacher-training in remedial reading and numeracy; ...training to improve communication with staff; test construction, performance appraisal, budgeting and implementing curriculum.")

Teaching Aids

(e.g., "...more teaching aids to assist teachers to improve their methods of teaching; ...more instructional materials, sporting equipment, musical instruments; .... increased educational technology; ...basic office equipment; ...textbooks and teacher guides.")

Equipment

(e.g., "...facilities for art room, equipment; ...overhead projectors, duplicating machines, photocopier; ...computer facilities for school; ...adequate cafe and kitchen facilities.")

Adequate Facilities

(e.g., "...proper toilet facilities; ...proper security for plant and staff rooms; ...improved building -- including basic amenities and facilities -- staff room, kitchenette, library, science room; ...proper classrooms;...larger classroom; ...bigger and better designed classroom space;... furniture that facilitates children's movement (table/chair);"...).

Strong Parent And Community Support

Parents Involvement

(e.g., "...programs to sensitize parents and other members of the community about intended changes;...supportive cohesive parents.")

Effective Support From The Education System

Regional Specialized Staff

(e.g., "....support staff -- guidance counselor, psychologist, medical; public relations; ...frequent visits from guidance officer/psychologist.")

School Climate

Rewards and Incentives

(e.g., "...adequate compensation; ...greater incentives; .... monetary incentives for primary school personnel.")

Enabling Conditions

A Capable Teaching Force

(e.g., "...quality cohesive staff;... quality staff must be able to fulfill the needs of the curriculum: music, art, PE; ...specialized staffing: music, PE, math, reading.")

Sample of An Existing School* Already Planning and Organizing Activities with Teachers, Parents and Students.

On Going Pursuits that Target Improvement in Student Learning Outcomes.
**Mucurapo Junior Secondary School, Port-Of-Spain, Trinidad and Tobago.*

School Climate *(Categories added for comparison with Conceptual Framework)*

- Programs to build leadership qualities and students self esteem
- Progress Successes of past students are highlighted with some of them coming in to address the assembly
- Daily assembly with talks on discipline/excellence

Teaching and Learning Process

- Unit projects aimed at developing reset skills and skills of interaction with each other
- Teaching English Language and literature based on every day experiences of students. Publication of school magazine -- students contribute articles
- Oral and written work are done individually or in groups
- Giving extra non-paying classes on weekends
- Field Trip/educational outings that avail student opportunities at practical experiences
- Drama re skits written, directed and executed by students
- Sports personality awards
- Regular assessments/evaluation
- Spelling sessions
- Quiz competitions
- Use of Open Book Exams
- Use of merit cards

Supporting Inputs

- Reports to update parents of students progress and school's progress
- Open door policy
- Interfacing with the police -- re law, order, discipline
- Meeting the social/emotional needs of students through the needy fund -- provide books, uniform, meals, transportation
- Having children use school library
- Use of Video and Audio Cassettes

ANNEX I

STAKEHOLDERS-DEVELOPED LOGICAL FRAMEWORK:
Classroom Instruction and Curriculum Strengthening

Thursday	Friday	Saturday
Introduction/Representation	Opening	Opening discussion: political and cultural context for project
Background and Reason for workshop	Review	
	work done	OVIs for Outputs
Norms	LFA	Workshop Eval: review expectations
Review Goal	Review of Outputs	Next Steps and commitments
Review Purpose	Maurice presents	Closing Round
Closing round	Agree on Outputs	Output Indicators
	Closing round	Closing round/Review expectations

Participants and Representation:

Instructions for the exercise were: "identify who you represent, and then who they represent."

J. Davidson:	Tobago House of Assembly--People of Tobago
A. Husein:	Director of Ed. Services--Permanent Sec. of Education
J. Hussain:	Dir. of E. Planning--Permanent Sec. of Ed.
T. Oliver:	Primary School Principals Association--Principals of Primary Schools
F. Roberts:	Planning Unit of Tobago House of Assembly-Tobago House of Assembly
W. Jeffers:	Director of School Supervisors--Permanent Se. of Ed.
M. Chin-Aleong:	Project Coordination Unit--Ministry of Education
E. Wiggins:	Association of ECCE--the ECCE industry
Z. Hasnian:	Project Coordination Unit--Min. of Ed.
N. Remy:	Association of ECCE--the ECCE centres
L Pujadas:	Director of Curriculum Development-Prmanent Secretary
C. Keller	University of West Indies--Govt. of Trinidad and Tobago
A. Thornhill	Nat. Council ECCE--Ministry of Education
M. Medord	Association for ECCE--ECCE centres
A. Clarke	Public Relations Office--Min. of Educ.
A. Wafe	Association of Secondary School Principals--Secondary School Principals
J Wysocki:	TTi/WB--Project Coordination Unit

Workshop Background

1. Design involves decentralization
   a. sustainable changes
   b. (requires) commitment at grass roots
2. Changes in Bank procedures
   a. shift from infrastructure to social development programs
   b. accountability and need for monitoring and evaluation
3. (TOGETHER THESE) Participation in project design
   a. method--involve stakeholders early in design
   b. use LogFRAME for getting agreement and setting indicators of performance

Expectations

-Learn about project to inform those participants present
-Learn enough to make decisions
-Understand role of facilitators and (his) contribution to EPCU
-Contribute to and refine project design
-Understand own role and position within project
-Have clearer knowledge of influence

Norms

-Reflect interests of your constituents
-focus conversation on issues and items at hand

Logical Framework: Classroom Instruction and Curriculum Strengthening

Narrative Summary (NS)	Verifiable Indicators (OVI)	Means of Verification (MOV)	Important Assumptions
Goal:			(Goal to Supergoal):
1 A well rounded graduate from a basic education system	1.1 all 10 indicators listed for purpose now apply here (e.g. rates of literacy, numeracy, aesthetic and moral education, transition rates, etc.)	1.1	1
Purpose:			(Purpose to Goal):
1 Classroom instruction curriculum strengthened.	1.1 All principals complete 3 regional workshops--lit, num, aesthetics--within BOP + 3 yrs. 1.2 All teachers exposed to content of regional workshop by EOP 1.3 1000 graduates from BEA training by EOP; 200 per year beginning 1998. 1.4 3 Schools (at each risk level) within each of 8 districts implement Spanish curriculum w/ infants by EOP. 1.5 All regional workshop trainers (participants in TA workshop) identified and trained by BoP + 2yrs 1.6 An education campaign for parents: -PTA membership increased -PTA established where not exist -rise in number of parents visiting shcools -rise in parent visits to schools -evidence of parents checking students homework	1.1 1.2 1.3 1.4 1.5 1.6	1 Facilities for designing and producing instructional materials established in regional offices on a timely basis to support curriculum. 2 Text-book provided to teachers on a timely basis to support implementation of new curriculum 3 other assumptions of timely performance of other project components as necessary
Outputs:			(Output to Purpose):
1 Workshop provides recommendation of content and design of curriculum appropriate to objectives of Trinidad and Tobago	1.1 Detailed analysis with recommendations for curriculum development submitted to MoE and EPCU within 1 month of workshop. 1.2 Recognition, within educational community, of accuracy and merit for 75% of reports recommendation.	1.1 presence of report and date of its receipt by MoE 1.2 Media (newspapers, TV) reports	1 Substitue teachers and principals available to allow for participation in workshops 2 relationship between MoE and representative boides of principals and teachers does not deteriorate in way to influence attendance 3
2 Regional workshops disseminate curriculum reforms to principals and teachers throughout country	2.1 90% of participants in regional workshops create viable plans (as workshop outcomes) for transfering techniques learnedto their staff. 2.2 Workshop trainers evaluate 90% of participants as competent to spread(teach) curriculum and its methodology	2.1 actual plans submitted to EPCU after workshop 2.2 trainers written evaluation of participants	

Logical Framework: Classroom Instruction and Curriculum Strengthening

Narrative Summary (NS)	Verifiable Indicators (OVI)	Means of Verification (MOV)	Important Assumptions
	2.3 (X#) regional workshops convened sufficient to train all principals and senior teachers in new curriculum	2.3 schedule of workshop and cost records from EPCU	
3 Principals and senior teachers conduct shool workshops in new curriculum and the necessary social support systems required to facilitate implementation.	3.1 X# of workshops in curriculum areas in each school within 6 months of principal/teacher completion of regional workshop	3.1 School Improvement Plan lists workshops, and records of attendance	
4 Design and test an education campaign for parents	4.1 A tested strategy for increasing parent's involvement in children's education identified by BOP + xyrs	4.1 Submission and acceptance of consultants reports	
5 B.Ed. program designed and implemented	5.1 First students enrolled in educational program accepted by MoE by BOP + Xyrs	5.1 Enrollment records	
	5.2 Students evaluation at completion of first semester and end of first year indicate programme fits their needs.	5.2 summarized student evaluation completed by EPCU	
	5.3 MoE approves B.Ed. curriculum programme by Z date.	5.3	
6 Design and implement program for teaching Spanish	6.1	6.1	
7 TA workshop and regional training (in) cooperative teaching and whole language approach	7.1	7.1	
Activities:			(Activity to Output):
1.1 Identify key stakeholders/participants for workshop		1.1	1
1.2 Solicit participation and publish results		1.2	
1.3 Distribute draft report from workshop to educational community for comment		1.3	
1.4 Integrate comments and publish final report		1.4	
2.1		2.1	
3.1		3.1	
4.1		4.1	
5.1 identify options and choose: contract for needs assessment		5.1	
5.2 conduct need assessment to determine B.Ed. objectives and structure		5.2	
5.3 write TORs for program (including evaluation)		5.3	
5.4 solicit programme proposal from training agencies		5.4	
5.5 evaluate proposals and select training agency		5.5	
5.6 award contract		5.6	
5.7 review monitoring reports from student evaluations of program and evaluate for impact		5.7	
5.8		5.8	
5.9		5.9	
6.1		6.1	
7.1		7.1	

ANNEX J : EDUCATION SECTOR FINANCING AND FINANCIAL IMPACT OF THE PROJECT[1]

Objective

To ensure the sustainability of educational inputs financed by the project and provide the Government with an analysis of projected recurrent costs which need to be incorporated into the permanent MOE budget.

Outputs

- Analysis of Public Expenditure in Education in Trinidad and Tobago, 1985-1993
- Criteria for Project Expenditure Choice: Role of Public Vs. Private Sector, Cost-Benefit of Inputs-Outcomes, and Impact on The Poor
- Incremental Recurrent Costs Incurred by the Project and Sustainability Strategy

[1] Information in annex was compiled from Kin Bing Wu's "The Financing of Education in Trinidad and Tobago, 1985-93. World Bank.

Trends of Public Expenditure in Education

1. The trend of public spending on education from 1985 to 1993 shows that Trinidad and Tobago reduced its investment in the sector. Amid the economic crisis, Government expenditure on education shrunk by 23% between 1985-87 and 1991-93, declining from 4.9% to 4% of GDP. Spending on education is an investment in human capital which is essential for economic growth. With the GDP growth of 4% in real terms in 1994 and a projected annual growth rate of 2-3% in the medium term and 4-5% by the end of the decade, the country is expected to have sufficient capacity to expand public expenditures on education and support the proposed Basic Education Project.

GDP, Central Government Revenue and Expenditure, and Government Expenditure on Education (In million Constant 1985 TT$)

	Three-year Average		% Change between
	1985-87	1991-93	Earlier & Later Yrs.
GDP	17,337	16,320	- 5.9%
Central Govt. Revenue	5,769	4,844	-16.0%
Central Govt. Expenditure	6,743	5,006	-25.8%
Recurrent Expenditure	5,531	4,635	-16.2%
Capital Expenditure	1,212	362	-70.1%
Govt. Education Expenditure	850	658	-22.6%
Recurrent Expenditure	836	622	-25.6%
Capital Expenditure	13	35	169.9%
Education as % of GDP	4.9%	4.0%	-17.8%
Education as % of Govt. Expend.	12.6%	13.1%	4.3%
Education Recurrent as % of Govt. recurrent	15.1%	13.4%	-11.2%
Education Capital as % of Govt. Capital	1.1%	9.7%	800.8%

Sources: Review of the Economy 1993; MOF Detailed of Estimates of Recurrent Expenditure; MOPD, Estimates: Development Programs.

2. **Functional Composition of Expenditures.** In 1985-87, primary education claimed 46% and secondary education 38% of the total recurrent education expenditure, while tertiary education (including university, teachers' college, and post-secondary technical institutes) claimed 11%. The magnitude of decline in public education expenditure over the years differed by level of education -- primary education expenditure declined by 33%, and secondary education expenditure by 36%, while vocational and technical education expenditure rose by 25% and tertiary education expenditure by 55%.

Intra-Sectoral Allocation	Percentage of Education Budget	Change Over the Period	Per-Student Recurrent Expenditure as % of GDP (1991-93)
Primary Education	46%	33% Decline	10%
Secondary Education	38%	36% Decline	16%
Post-Secondary Technical Institutes and Teacher's Colleges	4%	55% Increase	29% for vocational and technical education 98% for teacher education
Tertiary Education	7%	25% Increase	161%

3. As enrollment increased over the period, per-student spending was reduced by 41% in primary education, 38% in secondary education, and vocational and technical education by 7%, in contrast to an increase in higher education by 27%.

Changes in Enrollment and Annual Per-student Recurrent Public Expenditure

	3-year Average 1985-87	1991-93	% Change between Earlier & Later Yrs.
	Enrollment (Number of Students)		
Primary	172,401	195,850	13.6
Secondary	94,398	97,873	3.7
Vocational and Technical (all levels)	4,068	5,431	33.5
Teachers' College	-	485	-
Tertiary	3,653	4,587	25.6
Total			
	Annual Per-Student Recurrent Expenditure (In Constant 1985 TT$)		
Primary	2,207	1,298	-41.2%
Secondary	3,341	2,058	-38.4%
Vocational and Technical (all levels)	4,033	3,767	- 6.6%
Teachers' College	0	11,341	-
Tertiary	16,523	20,953	26.8%

Sources: MOF Detailed of Estimates of Recurrent Expenditure; MOPD, Estimates: Development Programmes.

4. In 1991-93, per-student recurrent public expenditure was equivalent to 10% of the GDP per capita for primary education, 16% for secondary education, 29% for vocational and technical education, 98% for teacher education, and 161% for university education. This ratio indicates that public subsidization was lowest in primary education where the poor have access to, but heaviest in university, where upper and middle class children are overwhelmingly represented. In comparison with the ratio of 1985-87, public spending in the early 1990s has become even more regressive.

5. **Economic Composition of Expenditures.** The major categories of recurrent spending on education are personnel cost, goods and services, minor equipment, and transfers and subsidies. Recurrent expenditures declined from 98% to 95% of the total education budget over the 1985-87 and 1991-93 period. While capital expenditure rose from less than 2% to 5%, it still remains below by international comparison. Of the recurrent expenditure, personnel was the largest component, accounting for 78% in 1985-87 and 69% in 1991-93. Transfers and subsidies to assisted schools, higher education, and households through scholarships, grants, and school lunch accounted for 17% to 22% over the same period. Goods and services accounted for 3% to 4%, and minor equipment for 0.1-0.2%. The Government is committed to increase its spending on educational inputs, namely, textbooks, library books, and in-service training.

Economic Classification of Expenditure	Percentage of Education Budget 1985-87	1991-93
Capital Expenditures	2%	5%
Recurrent Expenditure	98%	95%
Personnel	78%	69%
Transfers and Subsidies to Assisted Schools, Higher Education, and Households (scholarships, book grants, and school lunch)	17% (book grants halted & lunch grants and tertiary education subsidies increased)	22 %
Goods and Services	3%	4%
Minor Equipment	0.2%	0.1%

Financing Formula

6. The government fully finances the recurrent and capital expenditure of all government schools, as well as the recurrent expenditure of all assisted schools at both primary and secondary levels. The government also pays 100% of the capital expenditure in government schools, and 66.6% of the capital expenditure in assisted schools.

Type of Schools (Primary and Secondary Level)	Government Financing Recurrent Costs: • Salaries, cost of living adjustment allowance (COLA), National Insurance Scheme (NIS)[2], pensions and gratuities of teachers. • Purchase of goods and services (e.g., utilities, instructional materials, supplies, training, examination, and travel). • Minor equipment, which covers spare parts and small items. • Transfers and subsidies: grants to assisted schools for specific goods, services and minor equipment; scholarships for secondary school students; purchase of places in private secondary schools; books and uniform grants; and school lunch for low-income primary school students.	Capital Costs • School construction, refurbishment, and major repair. • Denominational boards make up the difference.
Government	100%	100%
Assisted	100%	66.6%

[2]NIS includes maternity leaves, invalidity and incapacity. Employees pay one-third, and employers pay two-thirds.

CRITERIA FOR EXPENDITURE CHOICE

7. The following section follows a framework which entails assessing (i) the role of the public sector versus private sectors; (ii) cost-benefit of education programs; and (iii) impact on the poor.[3]

The Role of the Public Sector *versus* the Private Sector

8. Given various market failures in the supply of education and the significant role human capital plays in increasing productivity and GDP, it is generally prudent for the Government, especially in developing countries, to intervene in the provision of education. In addition, it is generally believed that the primary and secondary education yield greater externalities than does higher education. In Trinidad and Tobago, private sector participation is also extensive. There is a significant provision and financing of education by nongovernmental organizations and communities. The impact of this participation can be shown by analyzing private education expenditures from: (i) household spending and (ii) community (denominational board, NGOs and parents) contributions.

9. Household expenditures comprise spending on textbooks, uniform, transportation, and meals. Community contributions include corporate donations, transfer from religious bodies, and parental/community contributions over and above their educational spending. Community contributions are used for capital construction, maintenance and repair, improvement of educational facilities, instructional materials and equipment. Estimated household spending is equivalent to 2% of GDP or half of the public expenditure on education. Other sources such as corporate and religious body donations and private tutoring would raise the total private sector spending on education above the 2% level.

Estimates of Household Spending on Education, 1991		
	In Million 1991 TT$	As % of GDP
Tuition fees in private schools	35.2	0.16
UWI student tuition fees	17.6	0.08
Total travel and lunch expense of private school students	32.3	0.14
Total book expense of private school students	6.5	0.03
Total uniform expenses of private school students	6.5	0.03
Total travel and lunch of public school students	262.0	1.16
Total book expenses of public school students	46.4	0.21
Total uniform expense of public school students	46.4	0.21
Total household spending on education	453.0	2.01

Source: Estimated based on T&T government's private school survey (PSS), 1991; SLC, 1992, and mission estimates.

10. Contributions from parent-teacher associations, corporation, and denomination boards supplement government funding. Schools that have a good reputation and connection with church, business and professional communities can raise substantial funds to supplement their recurrent and capital spending. The actual amount of possible community contributions from nongovernmental sources of funding for schools is hard to estimate because of the enormous variability from school to school and from year to year; however, the example below (box 1) exemplifies the positive impact on resource endowment of community involvement and school-

[3] This framework is introduced by Pradham Sanjay in "Evaluating Broad Allocations of Public Spending: A Methodological and Data Framework for Public Expenditure Review;" World Bank, Draft. This section quotes as well data and information from this report.

based activities. This is an extremely successful school which is able to raise funds, 135 times more than the government subvention in a year.

Box 1: The Total Sources of Public and Private Funding in An Extremely Successful Assisted School

The ability of schools to generate their own income varies tremendously from school to school and from year to year. Often, the location of the school, the business, religious, and community network the school has, and the leadership of school management matter in the ability of the school to generate own income. The following case is an unusually successful Roman Catholic primary school in the business district of Port-of-Spain which raised close to a half a million TT dollars in 1994. It should be noted that the government subvention to assisted schools is over and above teachers' salaries. The additional funds were used by the said school to build up the school library, music rooms, science and computer laboratories. By contrast, government schools, particularly those in rural areas, are not fitted with libraries, let alone laboratories and other activity rooms. This case illustrates just how substantial the variation is in the unaccounted for input from school to schools.

Total sources of public & private funding	TT$	% of Total
Government subvention (excluding teachers' salaries and capital expenditures)	3,600	0.7
Corporate Grants	3,250	0.7
Prize Money	4,350	0.9
Raffle	57,977	11.9
Cinema Show	4,536	0.9
Carnival Jam	1,125	0.2
Walkathon-Family day	39,030	8.0
Security Fund	108,000	22.2
Cafeteria	200,006	41.2
Carnival Band	2,870	0.6
Barbecue and Band Launching	59,920	12.3
Miscellaneous	874	0.2
Total Income	485,538	100.0

Cost-Benefit of Inputs-Outcomes

11. *Education Outcomes.* Education outcomes can be measured by indices of educational quantity and quality. Quantity indices such as gross enrollment, net enrollment and completion rates in Trinidad and Tobago compare favorably with other middle-income countries. The challenge ahead is to maintain those quantity indicators such as universal primary coverage. This initiative is particularly important at the secondary level, since the transition rates for the 1995-96 academic year show a decline to 66% from the levels of 82% and 75% in 1982 and 1990, respectively.

12. Quality refers to learning by students which may be measured by cognitive indices such as standardized achievement test scores. These indices provide the overarching motivation to guide the allocation of expenditures in education. In Trinidad and Tobago cognitive indices show an alarming decline in education quality.

13. In the Common Entrance Examination, 44% and 55% of Standard 5 students in government and 37% and 49% of students in assisted schools scored below the minimal acceptable levels in mathematics and English, respectively. In a separate international study on Reading Literacy in 1990/91, conducted by the International Association for the Evaluation of Educational Achievement (IEA), the findings confirmed the results of domestic tests (Schleicher

and Yip, 1993). The study found that not only did Trinidad and Tobago's students perform poorly by international comparison, there was also large between-school differences.[4]

Percentage of Primary School Students Scoring Below the Minimum Acceptable Levels in the Common Entrance Examination by School Type, 1994

CEE Subjects	Government Schools	Assisted Schools	Private Schools
Mathematics	44	37	13
English	55	49	12
Essay	28	24	4

Source: Ministry of Education

The Relation Between Inputs and Outcomes

14. Specific inputs which the project will support include: (i) financing of ECCE services through NGOs and communities; (ii) in-service training of principals, primary school teachers,[5] ECCE teachers, and school supervisors; (iii) training of ECCE training providers and supervisory staff; (iv) provision of textbooks, reading books, instructional materials and equipment; (v) building and rehabilitation of new primary schools to maintain universal coverage; (iii) studies to improve the cost-effectiveness of secondary school design, construction and utilization and construction of pilot schools; and (iv) resources to improve education management and the capacity of schools to mobilize community support. These inputs were identified by the National Task Force on Education and by project stakeholders during project design and preparation. The question is whether the inputs to be provided by the project are the most effective to achieve the quality outputs expected by the project.

15. The project emphasizes those educational investments known to yield the highest returns in the form of student learning.[6] A majority of international studies have shown the following factors are highly correlated to educational outcomes: (i) teacher education and training; (ii) appropriate facilities; and (iii) provision of textbooks and instructional materials. Research has also shown the positive social and academic achievement consequences of high-quality early education programs. The project will increase ECCE services in low-income communities to give poor children a head start and to improve performance in primary school. Finally, various studies have indicated that education institutions may be more accountable for their performance when households and communities are more involved in the management and oversight of their children's schools. Parental choice and community involvement are increasingly a focal point of recent educational reforms (e.g., El Salvador, Australia, Chile, New Zealand, Madagascar, etc.). The project would increase grassroots choice and leadership through the financing of school improvement plans prepared by actual beneficiaries

[4] Trinidad and Tobago's 9-year-olds' mean score was 445, with a standard deviation of 89. This makes T&T students rank third from the bottom among 27 participating countries, compared with the top score of 577 of Finnish students. The intra-class correlation, rho, was 0.32, indicating that 32 percent of the variation in achievement is between the schools, and 68 percent is between students within schools. Often 0.3 is taken as the cut-off point for identifying serious equity problems.

[5] 77% of primary school teachers have both a secondary school diploma and a Teachers College degree; 23% of teachers have only a secondary school diploma.

[6] World Bank, 1995; Lockheed and Verspoor, 1991; Harbison and Hanushek, 1992; Postlethwaite and Ross, 1989; Warwick and Reimers; Tatoo, et.al. 1989; Fuller and Clarke, (1994).

Summary of Estimated Expenditure Parameter Coefficients from Ninety-six Studies of Educational Production Functions in Developing Countries[7]				
	Number of Studies	Statistically significant +	Statistically significant --	Statistically insignificant
1. Teacher Education	62	35	2	26
2. Facilities	34	22	3	9
3. Expenditure per Pupil	12	6	0	6

Source: Harbison and Hanushek (1992)

16. ***Benefit Valuation***. Cost-benefit studies provide estimates of the dollar benefits returned for each dollar spent on the project. Information for returns on investment are key from a policy perspective and expenditure allocation; however in social sector projects, this question cannot be answered with a high degree of certainty because cost-effectiveness of a particular intervention is country-specific and can only be measured by quasi-experimental studies -- by comparing learning gains of students in experimental and control groups. Additionally, it is difficult to place dollar values on benefits with intrinsic value (e.g., better citizens) and the value of social costs averted (e.g., reduction in youth crime or drug abuse). Nevertheless, a cost-benefit analysis attempted to estimate the rates of return to different levels of education. Psacharapoulos (1993) reviews a vast range of studies to compare average rates of return by the level of education across the main regions of the world. The results from these rates of return reveal that overall, the returns to basic education (primary and secondary) are higher than those for higher education (see table below).

Returns to Investment in Education by Level (%), Full Method, Latest Year Regional Averages						
	Social Returns			Private Returns		
Country	**Primary**	**Secondary**	**Higher**	**Primary**	**Secondary**	**Higher**
Sub-Saharan Africa	24.3	18.2	11.2	41.3	26.6	27.8
Asia*	19.9	13.3	11.7	39.0	18.9	19.9
Europe/Middle East/N. Africa*	15.5	11.2	10.6	17.4	15.9	21.7
Latin America/Caribbean	17.9	12.8	12.3	26.2	16.8	19.7
OECD	14.4	10.2	8.7	21.7	12.4	12.3
World	18.4	13.1	10.9	29.1	18.1	20.3

* Non OECD

Source: Psacharopoulous (1993) "Return to Investment in Education - A Global Update," WPS #1067.

[7] A summary of 96 studies for developing countries (table below) interprets the inputs which have the most impact in student achievement (expected output). The authors of the summary count the number of studies with positive, negative and statistically insignificant results.

Impact on the Poor

17. Studies from international experiences suggest that investment in basic education (primary and lower secondary) is likely to be more efficient and equitable than investment in higher education.[8] In addition, primary and secondary education are usually more pro-poor than university/higher education.[9]

18. The ability of households to bear the direct and indirect cost of schooling affects educational attainment (and enrollment in ECCE and secondary levels). Poor families are less likely to be able to afford pre-school for their children, and thus less able to prepare them for formal schooling. The poor are less likely to be able to afford textbooks for their children, who, thus, are at a disadvantage in competition with students from better-off families.

19. **Textbooks and the Poor.** Textbooks have been proven to be a very important educational input, with direct positive impact on achievement. However, 31% of primary school students in the poorest quintile (based on per capita expenditure) did not have textbooks, compared with only 4% among the fifth quintile. The overwhelming reasons for nonavailability is that textbooks are too expensive (see table below).

Textbook Availability and Reasons for Non-availability (Percentage)

	Per Capita Expenditure Quintiles					
	1	2	3	4	5	
	Textbook Availability					
Primary School Students						
Has, Exclusive	68	83	92	96	95	
Has, Shared	1	3	0	1	1	
None	31	14	8	4	4	
Total	100	100	100	100	100	
N=	291	247	231	194	143	
	Reasons for Non-availability					
Books unavailable	4	6	6	0	0	5
Too expensive	90	91	61	100	60	86
Lost	0	3	11	0	0	2
Will buy	4	0	0	0	40	4
Other	0	0	22	0	0	3
No answer	1	0	0	0	0	1
Total	100	100	100	100	100	100

Source: SLC data./ Note: The percentage is rounded.

20. **Resource Endowment and Achievement Levels.** The linkage among family income, school types, and scores in CEE has been assessed. The table below shows that the mean scores of students whose parents were unemployed ranged from 52 to 58 between 1988 and 1992, those of students from middle class families were in the range of 63 to 68, and in the range of 76-78 for those students from upper class families.

[8] Jimenez (1987), Petrei (1977), World Bank (1986) as quoted in Jimenez (1993).

[9] Van de Walle and Nead (Forthcoming).

Family Income and Mean CEE Score of intakes into Secondary Schools from Various Years					
Income	Mean Group Scores				
Group	1992 intake	1991 intake	1990 intake	1989 intake	1988 intake
No employment	52	57	55	55	58
Low	55	58	59	57	60
Middle	63	67	67	65	68
High	76	78	80	78	78

Source: Jules, 1994, p. 266-268.

21. Two major factors lie behind the difference in achievement by expenditure quintile. At the family level, even though tuition is free of charge, households still bear the direct cost of lunch, books, and tutors which are inputs that would have an impact in student learning. At the community level, some schools are better able to tap into other private resources due to their connections with religious, business communities and higher income households. Therefore the resource endowment varies enormously from school to school.

22. Finally, analysis of data from the Survey of Living Conditions found that the educational attainment of heads of household differed enormously by expenditure quintile. For example, only 16% of household heads of the poorest 20% had secondary education, compared with 53% of heads of the wealthiest 20% who had secondary education and 16% had higher education. This data support findings that education has a strong correlation with earnings and inter-generational mobility.

Level of Educational Attainment by Heads of Household by Per Capita Expenditure Quintile						
	Per Capita Expenditure Quintile					Median Per Capita Expendt./Month
	1	2	3	4	5	(TT$)
Primary	84	76	73	56	32	631
Secondary	16	23	27	40	53	1,136
Tertiary	0.8	0.7	0.4	4.3	16	2,616

Source: SLC data, 1992.

23. **Conclusions.** The review of private spending on education has confirmed the uneven resource endowment of schools with and without community contributions and the differential ability of families from different income levels to pay for their children's education. Therefore, the project aims to improve current levels of public investment and compensate for the private underinvestment of the poor in their own children's education. Project expenditure will be used to improve quality and would strengthen the commitment to finance basic education levels as a strategy to break the cycle of poverty.

24. As for projected increase of the 10-14 age cohort by 8% and a growth rate of 39% for the 15-19 age group, the new challenge is to meet the increasing demand for school places at the upper primary and secondary levels. While the Government generates substantive savings and cost-effective strategies to expand access at the secondary level, the project will finance a pilot program to improve the cost effectiveness of secondary school design, construction and utilization.

25. The overall findings point to the urgency of increasing public investment in education in order to train a highly skilled, internationally competitive workforce required in an open economy. The resumption of economic growth in 1994 signals that this is an opportune time for increasing

investment in educational reform. Measures to improve the quality of education have recurrent cost implications and those concerned with quantitative expansion have both recurrent and capital cost implications. The sustainability of the proposed investment is analyzed in the next section.

Financial Impact of the Project

26. Total project costs are US$103 million, net of taxes, including US$30 million in incremental recurrent costs over a 7 year period (or an average of US$4.3 million/year). A yearly average of capital investment counterpart funds during the life of the project amount to approximately US$4.9 million. This figure represents 2% of the 1995 public sector investment programme (PSIP) and 43% of the 1995 PSIP allocation to the education sector.

27. The estimated financial impact of the project was calculated based on the following assumptions: (i) the real GDP growth rate was 4% in 1994 and would remain at 3% growth[10] during the life of the project, 1996-2002; (ii) the share of the education budget would remain at about 4% of GDP over the 1996-2002 period; (iii) real increments to the education budget would be used to finance improvements in basic education (ECCE, primary and secondary education), while public expenditure on higher levels of education, including transfers to universities would be kept in constant terms.

28. Over the life of the project, real incremental recurrent costs are estimated to grow from US$0.4 million in the first project year, to US$6.9 million in the last year. Based on projected education budget increases of 3% per year, project recurrent costs as a percentage of education expenditures would rise from 0.2% in 1996 to 2.7% in 2002. These recurrent costs would absorb approximately 45% of the aggregate increase (estimated at US$55 million) during the 1996-2002 period. After project completion, the yearly average incremental recurrent costs generated by the project are estimated to be US$8 million, which would account for about 3% of the annual sector budget (see table 1 below). In a no-growth scenario (table 2), the recurrent costs arising from the project as a percentage of education expenditures in 1994 would rise from 0.2% in 1996 to 3.5% in 2002 and to 4.1% during 2003-2009. In a worse case scenario, similar to the fluctuations experienced by the MOE budget during the 1980s, annual project recurrent costs as a percentage of education expenditures could rise to a maximum of 4.4% during the life of the project, and 6.8% during the post-project operational period (table 3).

[10] This is a conservative average; the IMF and the Bank estimate that the economy would grow between 2-3% in the medium term and 4-5% by the end of the decade.

Education Budget Impact of Incremental Recurrent Costs
Scenario #1: Expected 3 Percent Annual GDP Growth

	GDP (Expected 3% Average Yearly Growth)		MOE Budget (4% of GDP)		Projected Sector Budget Increments	Projected Accumulative Increments	Total Project Cost	Share (%) of MOE Budget	Incremental Recurrent Costs	Projected Accumulative Increments	Impact (%) on MOE Budget	As % of Projected Budget Increases	As % of Projected Accum. Increases
Year/Millions	TT$	US$	TT$		US$		US$		US$				
1994	28390.00	4894.83	1148.38	198.00									
1995	29525.60	5090.62	1194.31	205.92	7.92				0.00				
1996	30411.37	**5243.34**	1230.14	212.09	**6.18**	14.10	**4.18**	1.97	**0.41**	0.41	0.19	6.62	2.90
1997	31323.71	**5400.64**	1267.04	218.46	**6.36**	20.46	**18.54**	8.49	**0.56**	0.97	0.26	8.83	2.75
1998	32263.42	**5562.66**	1305.06	225.01	**6.55**	27.01	**17.71**	7.87	**2.11**	3.08	0.94	32.17	7.81
1999	33231.32	**5729.54**	1344.21	231.76	**6.75**	33.76	**18.52**	7.99	**4.21**	7.29	1.82	62.33	12.46
2000	34228.26	**5901.42**	1384.53	238.71	**6.95**	40.72	**19.04**	7.98	**5.19**	12.48	2.17	74.67	12.75
2001	35255.11	**6078.47**	1426.07	245.87	**7.16**	47.88	**10.68**	4.34	**5.98**	18.46	2.43	83.51	12.49
2002	**36312.76**	**6260.82**	**1468.85**	**253.25**	**7.38**	**55.25**	**3.41**	**1.35**	**6.91**	**25.36**	**2.73**	**93.62**	**12.50**
2003	37402.15	6448.65	1512.92	260.85	7.60	62.85		0.00	8.14	33.50	3.12	107.10	12.95
2004	38524.21	6642.11	1558.30	268.67	7.83	70.68		0.00	8.14	41.64	3.03	103.98	11.51
2005	39679.94	6841.37	1605.05	276.73	8.06	78.74		0.00	8.14	49.78	2.94	100.96	10.33
2006	40870.34	7046.61	1653.21	285.04	8.30	87.04		0.00	8.14	57.91	2.85	98.01	9.35
2007	42096.45	7258.01	1702.80	293.59	8.55	95.59		0.00	8.14	66.05	2.77	95.16	8.51
2008	43359.34	7475.75	1753.89	302.39	8.81	104.40		0.00	8.23	74.28	2.72	93.45	7.88
2009	44660.12	7700.02	1806.50	311.47	9.07	113.47		0.00	8.23	82.51	2.64	90.72	7.25
TOTALS					**$113**		**$92**		**$83**				
Project Implementation													

Scenario #2: No Growth
Based on 1994 Actual GDP

Millions	Real GDP (0% Yearly Growth)		MOE Budget (4% of GDP)		Projected Sector Budget Increments	Projected Accumulative Increments	Total Investment Costs (including disbursement for local taxes)	Share (%) of MOE Budget	Real Incremental Recurrent Costs	Projected Accumulative Increments	Impact (%) on MOE Budget
Year	TT$	US$	TT$		US$		US$		US$		
1994	28390.00	4894.83	1148.38	198.00							
1995	28390.00	4894.83	1148.38	198.00	0.00				0.00		
1996	28390.00	**4894.83**	1148.38	198.00	**0.00**	0.00	**4.18**	2.11	**0.41**	0.41	0.21
1997	28390.00	**4894.83**	1148.38	198.00	**0.00**	0.00	**18.54**	9.36	**0.56**	0.97	0.28
1998	28390.00	**4894.83**	1148.38	198.00	**0.00**	0.00	**17.71**	8.94	**2.11**	3.08	1.06
1999	28390.00	**4894.83**	1148.38	198.00	**0.00**	0.00	**18.52**	9.35	**4.21**	7.29	2.12
2000	28390.00	**4894.83**	1148.38	198.00	**0.00**	0.00	**19.04**	9.62	**5.19**	12.48	2.62
2001	28390.00	**4894.83**	1148.38	198.00	**0.00**	0.00	**10.68**	5.39	**5.98**	18.46	3.02
2002	28390.00	**4894.83**	**1148.38**	**198.00**	**0.00**	**0.00**	**3.41**	**1.72**	**6.91**	**25.36**	**3.49**
2003	28390.00	4894.83	1148.38	198.00	0.00	0.00		0.00	8.14	33.50	4.11
2004	28390.00	4894.83	1148.38	198.00	0.00	0.00		0.00	8.14	41.64	4.11
2005	28390.00	4894.83	1148.38	198.00	0.00	0.00		0.00	8.14	49.78	4.11
2006	28390.00	4894.83	1148.38	198.00	0.00	0.00		0.00	8.14	57.91	4.11
2007	28390.00	4894.83	1148.38	198.00	0.00	0.00		0.00	8.14	66.05	4.11
2008	28390.00	4894.83	1148.38	198.00	0.00	0.00		0.00	8.23	74.28	4.16
2009	28390.00	4894.83	1148.38	198.00	0.00	0.00		0.00	8.23	82.51	4.16
TOTALS					**$0**		**$92**		**$83**		
Project Implementation											

Scenario #3: **Worse-Case**

Economic Decline and Fluctuations Based on 1985-91 Actual Growth Rates

Millions /Year	GDP (1985-1991 actual growth rates) TT$	US$	MOE Budget (4% of GDP) TT$	US$	Projected Sector Budget Increments US$	Projected Accumulative Increments	Total Project Cost US$	Share (%) of MOE Budget	Incremental Recurrent Costs US$	Projected Accumulative Increments	Impact (%) on MOE Budget
1994	28390.00	4894.83	1148.38	198.00							
1995	30162.00	5200.34	1220.05	210.35	12.36				0.00		
1996 (1985)	18071.00	3115.69	730.97	126.03	-84.32	-71.97	4.18	3.32	0.41	0.41	0.32
1997 (1986)	17260.00	2975.86	698.17	120.37	-5.66	-77.62	18.54	15.40	0.56	0.97	0.47
1998 (1987)	17272.00	2977.93	698.65	120.46	0.08	-77.54	17.71	14.70	2.11	3.08	1.75
1999 (1988)	17825.00	3073.28	721.02	124.31	3.86	-73.68	18.52	14.90	4.21	7.29	3.38
2000 (1989)	18373.00	3167.76	743.19	128.14	3.82	-69.86	19.04	14.86	5.19	12.48	4.05
2001 (1990)	21539.00	3713.62	871.25	150.22	22.08	-47.78	10.68	7.11	5.98	18.46	3.98
2002 (1991)	22560.00	3889.66	912.55	157.34	7.12	-40.66	3.41	2.17	6.91	25.36	4.39
2003 (1985)	18071.00	3115.69	730.97	126.03	-31.31	-71.97		0.00	8.14	33.50	6.46
2004 (1986)	17260.00	2975.86	698.17	120.37	-5.66	-77.62		0.00	8.14	41.64	6.76
2005 (1987)	17272.00	2977.93	698.65	120.46	0.08	-77.54		0.00	8.14	49.78	6.76
2006 (1998)	17285.00	2980.17	699.18	120.55	0.09	-77.45		0.00	8.14	57.91	6.75
2007 (1999)	18373.00	3167.76	743.19	128.14	7.59	-69.86		0.00	8.14	66.05	6.35
2008 (1990)	21539.00	3713.62	871.25	150.22	22.08	-47.78		0.00	8.23	74.28	5.48
2009 (1991)	22560.00	3889.66	912.55	157.34	7.12	-40.66		0.00	8.23	82.51	5.23
TOTALS					($41)		$92		$83		
Project Implementation											

Incremental Recurrent Costs by Corresponding Line Item

Primary									
	Personnel Budget	New Primary School Teachers	(%) of Incremental Costs on Line Item	Goods and Services and Grants	Maintenance of New Schools and Equipment	(%) Incremental Costs Impact on Line Item	Goods and Services (only)	Replacement and Repair of Textbooks	(%) Incremental Costs Impact on
1994	61.05		0.00	16.63			2.6		
1995	61.05		0.00	16.63			2.6		
1996	61.05		0.00	16.63	0.01	0.05	2.6		
1997	61.05		0.00	16.63	0.02	0.13	2.6		
1998	61.05	0.73	1.20	16.63	0.07	0.41	2.6		
1999	61.05	1.39	2.27	16.63	0.11	0.65	2.6		
2000	61.05	2.19	3.59	16.63	0.15	0.93	2.6		
2001	61.05	2.81	4.61	16.63	0.19	1.13	2.6		
2002	61.05	3.65	5.98	16.63	0.23	1.36	2.6		
2003	61.05	3.65	5.98	16.63	0.23	1.36	2.6	1.30	50.16
2004	61.05	3.65	5.98	16.63	0.23	1.36	2.6	1.30	50.16
2005	61.05	3.65	5.98	16.63	0.23	1.36	2.6	1.30	50.16
2006	61.05	3.65	5.98	16.63	0.23	1.36	2.6	1.30	50.16
2007	61.05	3.65	5.98	16.63	0.23	1.36	2.6	1.30	50.16
2008	61.05	3.65	5.98	16.63	0.23	1.36	2.6	1.40	53.74
2009	61.05	3.65	5.98	16.63	0.23	1.36	2.6	1.40	53.74

Pre-School					
	Transfers and Subsidies Budget	New ECCE Teacher Salaries	(%) Impact on Line Item	NCECCE Administrative Staff	(%) Impact on Line Item
1994	0.34				
1995	0.34				
1996	0.34	0.08	24.71	0.06	0.06
1997	0.34	0.17	50.65	0.07	0.06
1998	0.34	0.26	76.59	0.07	0.06
1999	0.34	0.39	116.12	0.07	0.06
2000	0.34	0.53	155.65	0.07	0.06
2001	0.34	0.66	195.18	0.08	0.06
2002	0.34	0.71	208.76	0.08	0.06
2003	0.34	0.76	222.35	0.08	0.06
2004	0.34	0.76	222.35	0.08	0.06
2005	0.34	0.76	222.35	0.08	0.06
2006	0.34	0.76	222.35	0.09	0.06
2007	0.34	0.76	222.35	0.09	0.06
2008	0.34	0.76	222.35	0.09	0.06

Incremental Recurrent Costs by Corresponding Line Item

Educational Services			
	Personnel Budget	MOE Administrative Personnel Incremental Costs	(%) Impact on Line Item
1994	15.29		
1995	15.29		
1996	15.29	0.06	0.41
1997	15.29	0.06	0.41
1998	15.29	0.06	0.41
1999	15.29	0.06	0.41
2000	15.29	0.06	0.41
2001	15.29	0.06	0.41
2002	15.29	0.06	0.41
2003	15.29	0.06	0.41
2004	15.29	0.06	0.41
2005	15.29	0.06	0.41
2006	15.29	0.06	0.41
2007	15.29	0.06	0.41
2008	15.29	0.06	0.41

Secondary			
	Personnel Budget	New Secondary School Teachers	(%) Impact on Line Item
1994	267.60		
1995	267.60		
1996	267.60	0.00	0.00
1997	267.60	0.00	0.00
1998	267.60	0.67	0.25
1999	267.60	1.91	0.71
2000	267.60	1.91	0.71
2001	267.60	1.91	0.71
2002	267.60	1.91	0.71
2003	267.60	1.91	0.71
2004	267.60	1.91	0.71
2005	267.60	1.91	0.71
2006	267.60	1.91	0.71
2007	267.60	1.91	0.71
2008	267.60	1.91	0.71

ANNEX K: EDUCATION STATISTISTICS

Education system in Trinidad and Tobago

Level	Age Group	Net Coverage	Enrollment	Type of School	Entrance Eligibility	Exit Exam
Pre-Primary	3-4	43%	22,000	6% govt. 13% assisted 81% private	None	None
Primary:		96%	203,654	30% govt. 67% assisted 3% private	Catchment of school district	CEE
Infant Classes	5-6					
Standards (1-5)	7-11					
Post-primary (terminal for those failed SLC)	12-13	3%	6,000		Failed SLC CEE twice	
Secondary:		75%	104,214	77% govt. 18% assisted 5% private		14+ Exam
Forms I-III	12-14				CEE or SLC scores	CXC; GCE "O" Level; NEC
Forms IV-V	15-16					
Matriculation:						
Lower Form VI	17	13%			CXC scores	GCE "A" Level
Upper Form VI	18					
Technical/Vocational						
Technical Institutes	17-18	2%	4,107	Mostly govt. & assisted	NEC scores	CAC
Youth camps			795		No criteria	
Youth centers			777			
Teachers' College	17-19		539	Govt.	CXC scores exam.	Internal
University of West Indies	19-24	2%	5,191	Govt.	GCE "A" Level Exam.	UWI/ Profess.

Source: T&T Ministry of Education National Task Force, Education Policy Paper (1993-2003): White Paper, 1994; T&T Central Statistical Office, Report on Education Statistics 1990-1991, 1994. Thaaker, John, Prefeasibility Study of Technical Vocation Education and Training in Trinidad and Tobago, Revised Mid-Term Report, 1992.

TRINIDAD AND TOBAGO
BASIC EDUCATION PROJECT

Selected Documents and Data Available in the Project File

A. Selected Reports and Studies Related to the Sector

A.1 The Financing of the Education in Trinidad and Tobago, 1985-1993. Kin Bing Wu, The World Bank Report No. 14628-TR

A.2 Servol Pre-School and Adolescent Training Programmes in Trinidad and Tobago. Diana Mahabir, International Institute for Educational Planning, UNESCO, May, 1993

A.3 The Future of Education in the Caribbean. CARICOM Advisory Task Force on Education, September 1993

A.4 The Mobilization of Grassroots Communities: The Experience of Servol. Fr. Gerry Pantin, Servol Executive Director, UNICEF, February, 1984

B. Selected Reports and Studies Related to the Project

B.1 Early Childhood Care and Education In Trinidad and Tobago. Carol Logie and High Scope, September 1995

B.2 Trinidad and Tobago Basic Sector Study Survey: Instructional Materials. John Wood, July 1994

B.3 Proposals for Decentralization. Ministry of Education, July 1993

B.4 Making School Books Affordable and Available. Cabinet Appointed Committee, Government of the Republic of Trinidad and Tobago, August 1992

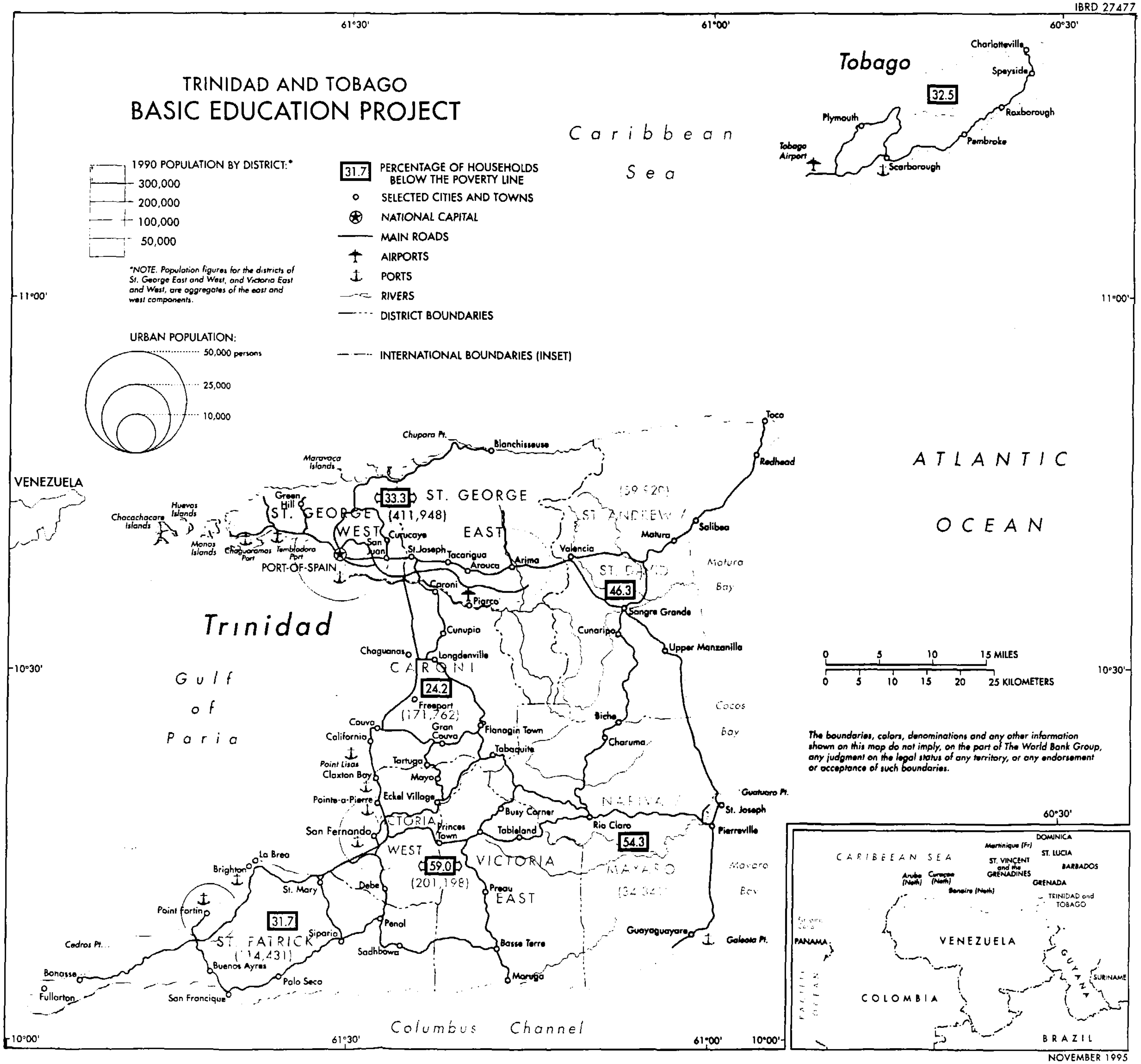
C. Selected Laws and Policies that Relate to the Project

C.1 Education Policy Paper (1993-2003). National Task Force on Education, Ministry of Education, March 1993

C.2 Laws of Trinidad and Tobago: Education Act. Government of the Republic of Trinidad and Tobago, December 1979

C.3 Draft Strategic Plan 1992-1997. Ministry of Education, June 1992

MAP SECTION



IBRD 27477
TRINIDAD AND TOBAGO
BASIC EDUCATION PROJECT
1990 POPULATION BY DISTRICT:*
300,000
200,000
100,000
50,000
*NOTE. Population figures for the districts of St. George East and West, and Victoria East and West, are aggregates of the east and west components.
URBAN POPULATION:
50,000 persons
25,000
10,000
31.7 PERCENTAGE OF HOUSEHOLDS BELOW THE POVERTY LINE
SELECTED CITIES AND TOWNS
NATIONAL CAPITAL
MAIN ROADS
AIRPORTS
PORTS
RIVERS
DISTRICT BOUNDARIES
INTERNATIONAL BOUNDARIES (INSET)
Caribbean Sea
Tobago
32.5
Charlotteville
Speyside
Roxborough
Pembroke
Scarborough
Plymouth
Tobago Airport
ATLANTIC OCEAN
Trinidad
Gulf of Paria
Columbus Channel
VENEZUELA
ST. GEORGE WEST
ST. GEORGE EAST
33.3
(411,948)
ST. ANDREW
ST. DAVID
46.3
CARONI
24.2
(171,762)
VICTORIA WEST
VICTORIA EAST
59.0
(201,198)
NARIVA
MAYARO
54.3
ST. PATRICK
31.7
(114,431)
PORT-OF-SPAIN
Toco
Redhead
Salibea
Matura
Matura Bay
Valencia
Sangre Grande
Upper Manzanilla
Cunaripo
Cocos Bay
Biche
Charuma
Guataro Pt.
St. Joseph
Pierreville
Rio Claro
Mayaro Bay
Guayaguayare
Galeota Pt.
Chupara Pt.
Blanchisseuse
Maracas Islands
Green Hill
Huevos Islands
Chacachacare Islands
Monos Islands
Chaguaramas Port
Tembladora Port
San Juan
Curucaye
St. Joseph
Tacarigua
Arouca
Arima
Caroni
Piarco
Cunupia
Chaguanas
Longdenville
Freeport
Couva
California
Gran Couva
Flanagin Town
Tabaquite
Point Lisas
Claxton Bay
Tortuga
Mayo
Eckel Village
Pointe-a-Pierre
Busy Corner
Princes Town
Tableland
San Fernando
La Brea
Brighton
St. Mary
Debe
Point Fortin
Penal
Siparia
Preau
Basse Terre
Sadhbowa
Moruga
Cedros Pt.
Bonasse
Fullarton
Buenos Ayres
Palo Seco
San Francique
0 5 10 15 MILES
0 5 10 15 20 25 KILOMETERS
The boundaries, colors, denominations and any other information shown on this map do not imply, on the part of The World Bank Group, any judgment on the legal status of any territory, or any endorsement or acceptance of such boundaries.
CARIBBEAN SEA
DOMINICA
Martinique (Fr)
ST. LUCIA
ST. VINCENT and the GRENADINES
BARBADOS
Aruba (Neth)
Curaçao (Neth)
Bonaire (Neth)
GRENADA
TRINIDAD and TOBAGO
PANAMA
VENEZUELA
COLOMBIA
GUYANA
SURINAME
BRAZIL
61°30'
61°00'
60°30'
11°00'
10°30'
10°00'
NOVEMBER 1995

IMAGING

Report No: 14065 TR
Type: SAR