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PROJECT COMPLETION REPORT

**TRINIDAD AND TOBAGO - THIRD EDUCATION PROJECT
(LOAN 1722-TR)**

December 27, 1985

**Projects Department
Latin America and the Caribbean Regional Office**

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TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT (LOAN 1722-TR)
PROJECT COMPLETION REPORT

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PROJECT COMPLETION REPORT

TRINIDAD AND TOBAGO - THIRD EDUCATION PROJECT
(LOAN 1722-TR)

PREFACE

The Third Education Project in Trinidad and Tobago was partly financed under Loan 1722-TR (US\$20 million) and was signed on July 13, 1979. The project was never fully implemented and was allowed to lapse on its original closing date (December 31, 1983) with 91% of the loan (US\$18.2 million) cancelled.

This project completion report (PCR) was prepared by a mission that visited Trinidad and Tobago in February 1985. Since the project was never fully implemented, this PCR focuses on identification of the possible causes for the less than successful implementation and draws some useful lessons. The PCR is based on: (a) discussions with high level officials of Trinidad and Tobago; (b) the findings of the mission; (c) the outline completion report prepared by the Borrower's Educational Facilities Management Unit (EFMU); and (d) data from Bank files, including Board Resolution No. 79-76 dated June 7, 1979, the Loan Agreement and related legal documents, the President's Report No. P-2566-TR of May 22, 1979 and the Staff Appraisal Report No. 2430b-TR of May 21, 1979.

In accordance with the revised procedures for project performance reporting, this project completion report was read by the Operations Evaluation Department (OED) but the project was not audited by OED staff. The draft PCR was sent to the Borrower and its agencies in September 1985. The comments received have been taken into account in finalizing the report and are reproduced as Attachment I.

TRINIDAD AND TOBAGO
THIRD EDUCATION PROJECT (LOAN 1722-TR)
PROJECT COMPLETION REPORT

Project Data

Borrower: Republic of Trinidad and Tobago

Fiscal Year: January 1 - December 31

A.	<u>The Loan</u>	<u>Appraisal Estimate</u>	<u>Actual 1982</u>		
	Total Project Cost (US\$ million)	54.6	187.9 <u>a/</u>		
	Estimated Overrun (%)	—	244.1		
	Loan Amount (US\$ million)	20.0	20.0		
	Amount Cancelled (US\$ million)	—	18.2		
	Date of Completion of Physical Component	06/83	n.a. <u>b/</u>		
	Proportion Completed by Original Completion Date (%)	100	9		
	Interest Rate (%)	7.9	7.9		
B.	<u>Cumulative Estimated and Actual Disbursements</u> (US\$ million)				
<u>Fiscal Year</u>	<u>1980</u>	<u>1981</u>	<u>1982</u>	<u>1983</u>	<u>1984</u>
Estimated:	3.77	9.24	16.64	20.00	20.00
Actual:	—	—	—	1.32	1.85
As %:	—	—	—	6.60	9.30

C. Currency

Currency Name: Trinidad Dollar (TT\$)
Exchange Rate:
Appraisal Year US\$1 = TT\$2.4
Completion Year US\$1 = TT\$2.4

a/ Last estimated cost.

b/ The major part of the physical component was not started and the major part of the loan was cancelled.

D. <u>Project Generation:</u>	<u>Proposed</u>	<u>Actual</u>
First Mention in Files	--	05/74
Government Application	--	10/78
Negotiations (Start)	05/79	05/79
Board Approval	06/79	06/79
Loan Agreement Signed	07/79	07/79
Effective Date	10/79	08/80
Closing Date	12/83	12/83 <u>c/</u>

E. Mission Data

<u>Type of Mission</u>	<u>Date</u>	<u>No. of Staff Weeks</u>	<u>Mission Composition d/</u>
Programming	02/75	3.6	6 Bank
Planning/Identification	07/76	10.0	3 Unesco
			1 Bank (Ec)
Planning/Identification	11/76	2.0	2 Bank (A)
Planning/Identification	11/76	5.4	2 Bank (Ed,Ec)
			1 Unesco
Reconnaissance	02/77	1.0	1 Bank (Ed)
Reconnaissance	06/78	1.0	1 Bank (Ed)
Reconnaissance/Identification	07/78	2.0	2 Bank (A,Ed)
Preparation	09/78	16.0	4 Unesco
Appraisal	11/78	9.0	3 Bank (Ed,A,Ec)
Post Appraisal	03/79	<u>1.0</u>	1 Bank (Ed)
Subtotal		51.0	
Supervision Missions			
1	08/79	1.0	1 Bank (Ed)
2	12/79	2.0	2 Bank (Ed,A)
3	06/80	0.6	1 Bank (Ed)
4	08/80	1.0	1 Bank (Ed)
5	06/81	0.6	1 Bank (A)
6	02/82	2.0	2 Bank (Ed,A)
7	10/82	3.0	3 Bank (Ec,A,L)
8	05/83	<u>2.0</u>	2 Bank (Ed,A)
Subtotal		12.2	

c/ Loan allowed to lapse on this date.

d/ Ed = Educator; Ec = Economist; A = Architect; L = Loan Officer.

F. Allocation of Loan Proceeds

	<u>Loan Proceeds</u> (US\$ thousand)	<u>Disbursed</u>
1. Civil Works	8,700.00	523.38
2. Furniture and Equipment	7,000.00	--
3. Project Management Services	1,400.00	1,248.44
4. Technical Assistance	800.00	71.77
5. Unallocated	2,100.00	--
Amount cancelled	<u>--</u>	<u>18,156.41</u>
Total	20,000.00	20,000.00

PROJECT COMPLETION REPORT

TRINIDAD AND TOBAGO - THIRD EDUCATION PROJECT (LOAN 1722-TR)

EVALUATION SUMMARY

Introduction

The Third Education Project (Loan 1722-TR in the amount of US\$20 million) was prepared by the Government of Trinidad and Tobago with the assistance of UNESCO, and was appraised in November 1978 (Appraisal Report No. 2430b-TR dated May 21, 1979). The loan was processed expeditiously and was approved six months after the return of the appraisal mission. The Loan Agreement was signed one month later on July 13, 1979 and became effective on August 29, 1980. Total project costs were estimated at US\$54.6 million. In the event the project was never fully implemented and the loan was allowed to lapse on its original Closing Date (December 31, 1983) when the US\$18.2 million remaining in the loan account was cancelled.

Objectives

The project was to (para. 2.02);

- (a) help the Government expand access to schooling and equalize educational opportunity by providing: (i) 27 replacement primary schools; (ii) 2 junior secondary schools; and (iii) extensions for 6 senior and 2 composite (junior/senior) secondary schools;
- (b) improve the quality and relevance of education by establishing a National Curriculum and Teacher Development Center and a Regional Teacher Development Center; and
- (c) assist the Ministry of Education and Culture (MEC) in creating a permanent and efficient school construction and management unit by establishing an Education Facilities Management Unit (EFMU).

Implementation Experience

The project was intended to end a long period of strained relations between the Bank and the Government of Trinidad and Tobago. This consideration led to the Bank's effort to hasten the processing of the loan, and to the relaxation of some of the Bank's normal criteria (para. 3.02). In retrospect, the scope and complexity of this project imposed heavier demands on the Borrower's management capabilities than it could provide at the time (para. 3.04). The lack of advanced and thorough preparation of the project decreased the likelihood that the project would be successful before implementation was even attempted (para. 3.05). The project was finally abandoned by the Government because of its inability to adjust the project scope in order to redress a financing gap created by high inflation rates (especially

in the construction industry) (para. 3.07), and exacerbated by a thirteen-month delay in achieving loan effectiveness (para. 4.03) and underestimation of project costs and price contingencies (para. 3.06). This delay doubled estimated project costs before implementation had even begun. Total estimated project costs finally rose to about 350% of the original estimate. The combined effects of the substantial project cost overrun and deteriorating economic conditions in Trinidad and Tobago confronted the Government with a policy dilemma which, in the end, it was unable to resolve, despite the urgent need to revise the project scope (para. 4.08).

Results

Of a total of 39 project institutions originally envisioned, only two extensions to composite secondary schools were actually completed (para. 5.01). The project achieved limited success: (i) in institution building aspects (establishment of EFMU and training programs for teachers of agriculture and guidance/counselling) (para. 5.02); and (ii) in sensitizing the Government to revise its policies with respect to access to secondary education, the importance of curriculum and teacher development, and realistic class sizes and construction standards (paras. 5.06 and 5.07).

Sustainability

Most of the physical facilities originally included in the project were not provided, so the question of the sustainability of the benefits they would have conferred does not arise. The project had some limited success in its institution-building aspects and these, though difficult to quantify, are likely to have long-term impact.

Findings and Lessons

The unusual circumstances and implementation experience of this project provide some useful lessons to Bank staff:

- (a) Although approval of this project was accomplished expeditiously in order to improve relations with Trinidad and Tobago, Bank/country relations would have benefited from a more deliberate and critical approach to project preparation (para. 6.02).
- (b) During project generation and preparation, the Bank should place emphasis on evaluating the borrower's capacity to implement the proposed project with respect to its scope and complexity. The simple provision of project management consultants is not sufficient, but must be calibrated to a borrower's own management capacity (para. 6.03).
- (c) The Bank needs to devise effective guidelines for dealing with unusually large contingencies in volatile economies. The reasoning behind contingency estimates formulated should be clearly documented. When estimated price contingencies are found to be excessive, the Bank should limit the size of the appraised project, or break the project into phases which would be separately approved (para. 6.04).

- (d) the Bank should act early and decisively once it has detected a borrower's lack of diligence in project implementation. In cases where implementation is clearly hopeless, the Bank should look for a way to cancel the loan without having to wait for the closing date or trying to persuade the borrower to request a cancellation (para. 6.05).

I. Socioeconomic Setting

1.01 The economic outlook in Trinidad and Tobago changed considerably between the time that the Third Education Project was prepared and the time that it was scheduled to be completed. The evolution of economic conditions and public policy from the late 1960s to the present have significantly shaped the overall development of the entire education sector, and new policies needed to address fiscal and balance of payment problems particularly affected the implementation of the Third Education Project.

1.02 The oil price hike in 1974 had a dramatic effect on economic performance in the 1970s. Economic growth and fiscal and monetary performance strengthened, and large gains were seen in both consumption and investment. Public current and capital expenditures increased dramatically during this period, and public investment projects in most sectors of the economy multiplied until they reached 70 percent of total investment and 20% of GDP.

1.03 At the time the Third Education Project was prepared (i.e. around 1978), the production of crude oil and the growth of the oil-dependent Trinidadian economy peaked. As a result of the rapid increase in public investment, significant problems arose in the management of government projects, including the lack of reliable estimates of costs, benefits, phasing, and current expenditure implications of the projects. Significant cost overruns and delays were common among projects undertaken in the late 1970s, even in the Government's priority energy and heavy-industry projects.

1.04 By 1982, the decline in the price of petroleum and the gradual decrease in the domestic production of oil brought about real decreases in public sector revenues and slower economic growth. The fall in export earnings and thus in government revenues led to a marked deterioration in the fiscal position of the country in 1982 in face of the Government's continuing commitment to oil generated expenditures. Because of the projected continuous decline in petroleum revenues, the Government in the 1980s could not expect to increase expenditures at the same pace as it had in the late 1970s.

II. Project Objectives and Content

2.01 The Third Education Project was designed to support the third phase of the Government's Education Development Plan (1967-1982) and to contribute specifically to institution building, the equalization of educational opportunity, and the provision of relevant education of high quality in Trinidad and Tobago.

2.02 The project proposed to:

(1) Construct, furnish and equip:

- (a) replacements for about 27 dilapidated denominational primary schools (9,320 student places);
- (b) two new junior secondary schools (2,880 places);

- (c) extensions to 6 senior and 2 composite secondary schools (1,320 student places);
- (2) Establish the National Curriculum and Teacher Development Center (NCTDC) and the Regional Teacher Development Center (RTDC) to build permanent procedures for curriculum development, teacher education, and the production of teaching/learning materials;
- (3) Initiate training courses for agricultural teachers at the Eastern Caribbean Institute of Agriculture and Forestry; and
- (4) Strengthen the Ministry of Education and Culture (MEC) by establishing the Educational Facilities Management Unit (EFMU) and by providing technical assistance (10 staffyears of specialist services and 9.25 staffyears of fellowships) and specialist services for project management and administration (10 staff years).

III. Project Generation and Preparation

A. Introduction

3.01 The Third Education Project was intended to end a long period of strained relations between the Bank and Trinidad and Tobago. By accelerating approval of a third project, the Bank hoped not only to improve relations with Trinidad and Tobago, but also to encourage the Government to accept a leading role in the development of the Caribbean Region.

3.02 The Bank's effort to expedite Board presentation of the Third Education Project resulted in the lack of thorough preparation of the project, particularly the misjudgment of the borrower's technical and managerial capacity to implement the project, and thus led to its unsuccessful implementation. Inadequate preparation of the project also resulted in the failure to adequately define site requirements and appropriate price contingencies, which aggravated the effects of the Bank's misjudgment of the borrower's managerial capacity.

B. Misjudgment of Borrower's Management Capacity

3.03 The design of the Third Education Project (with a loan amount of US\$20 million) was more ambitious than that of the First and Second Projects (with loan amounts of \$9.2 and \$9.3 million respectively). The Loan Request Document prepared by the Government of Trinidad and Tobago with the assistance of UNESCO noted that, "The proposed Third World Bank Educational Loan Project is of unprecedented magnitude in terms of the number of sub-projects involved and also in respect of variety...Hence it will be advisable to strengthen the staff of the (Project Implementation) Unit at the upper level." The Staff Appraisal Report (May 21, 1979) also noted that

"Crucial to the construction program is the early selection and appointment of the expatriate project management group." At the time the project was presented to the Board, Bank staff acknowledged that the project faced the risk of delay in the engagement of the project management team (PMT) ("Loan and Project Summary" of the President Report). In order to hasten approval of the project, however, the Bank allowed the contracting of the PMT (as well as the staffing of the PIU) to be met by effectiveness rather than Board presentation as recommended by the appraisal mission, and made no adequate provision for countervailing the risks other than sending a Bank mission to assist the borrower in drawing up the terms of reference for a project management team.

3.04 Since the success of the Third Education Project strongly depended on the existence of qualified local implementation authorities and expatriate advisors, and since the more limited Second Education Project experienced difficulties in attracting and keeping PIU staff, it seems that the staffing of the EFMU and the contracting of the PMT should have been prime concerns of the project, and thus that these conditions should have been met before Board presentation even if this would have postponed approval of the project. The Bank staff believed that provision of a PMT would solve the management problems experienced in the first two education projects. The use of external management consultants was not, however, effective since the Government's own management capability was misjudged. In retrospect, the project should have been much smaller and simpler if adequate measures to strengthen the borrower's managerial capacity were not identified at appraisal. Since the Third Education Project was much larger than either of the first two projects implemented in Trinidad and Tobago, the preparation of the project should have been exceptionally thorough rather than cursory (paras. 3.05, 3.06).

C. Postponed Site Selection

3.05 Some of the critical planning for project implementation was not completed before Board presentation. During appraisal, the exact requirements for only 9 of the 15 identified primary schools were specified (i.e. location and size of each school). It was assumed that the other six schools and the 12 schools yet to be identified would be built on the sites of the old substandard schools they were to replace. When this proved to be impossible, finding suitable sites became a problem. Site acquisition and the execution of topographic surveys were also delayed because of a shortage of land surveyors in the country. Because these considerations were not identified at appraisal, the borrower was not able to budget for site acquisition and other costs until well into implementation when economic constraints were already being felt.

D. Underestimation of Price Contingencies

3.06 The tremendous funding gap, which finally caused the project to be abandoned by the Government, was partially created at appraisal. The Bank considered the Loan Request Document contingency estimates excessive, and reduced them significantly. In hindsight, this judgement was unsound since

it neglected factors which subsequently led to high inflation in Trinidad and Tobago, particularly the high level of Government investment expenditures (para. 1.02). The following table compares the estimated price contingencies in the Request Document and the SAR:

Price Contingencies (%)

	Civil Works	Furniture	Equipment	Technical Assistance	Average
SAR	38.2	33.0	19.5	12.0	34.0
Request Doc.	101.0	55.0	55.0	50.0	88.5
XSAR/Request	37.8	60.0	35.5	24.0	38.4

3.07 Excess demand in the construction industry resulted in shortages of skilled labor and materials (cement and concrete in particular) and allowed contractors to impose inflated construction prices (Annexes 1 and 2). Unit prices for some of the main building trades in Trinidad and Tobago show increases of between 168% and 302% for the period 1979 to 1981. Actual construction costs per square foot for the two composite schools, based on the final amounts paid to contractors, show increases on the order of 246% and 299% respectively compared to the appraisal estimate of 38.2 percent (see Annexes 3 and 4). ^{1/} The SAR (May 21, 1979) noted that the construction industry in Trinidad and Tobago was under considerable strain and presented a risk to successful project implementation. It stated, though, that "the Government has launched a program to expand local cement production, facilitate the availability of building materials, and encourage civil works bids from non-national contractors." These measures, however, never entirely materialized and were not sufficient to relieve the considerable strain on the construction industry. The higher price contingencies originally estimated by Trinidad and Tobago and UNESCO during project preparation would have been more appropriate than those adopted by the Bank. The underestimation of price contingencies greatly reduced the potential contribution of the loan amount and increased above estimates the counterpart funds needed to sustain the project.

IV. Project Implementation

A. Introduction

4.01 The implementation achievements of this project consist mainly of extensions built to two composite secondary schools and a limited technical

^{1/} In dollars, cost overruns could have been smaller had the exchange rate been adjusted for the difference in the rates of local and foreign inflation. Instead, the exchange rate was constant throughout the project implementation period despite the sharp difference between local and foreign inflation rates.

assistance component. The failure to complete the rest of the project is attributed to the Bank's misjudgement of the local management capacity (para. 3.04). During the implementation period, the Government's limited management capabilities were evidenced by: (1) inadequate staffing of the PIU; (2) changes in Government education standards; (3) disputed procurement procedures; and (4) incomplete and delayed communication with the Bank. Management problems which impeded successful implementation of the project were exacerbated by a delay in reaching loan effectiveness, and by changes in political and economic conditions in Trinidad and Tobago which delayed Government decisions on the reformulation of project scope.

B. Delayed Loan Effectiveness

4.02 The loan actually became effective on August 29, 1980, 13 months after signing instead of the 3 months originally foreseen. Compliance with a condition for effectiveness, (i.e. the contracting of consultants for the PMT who were to assist the EFMU), caused this 13 month delay because the contract proposal of the first firm selected to provide these services, which was prepared using expected inflation rates, had to be rejected as excessive in the final negotiation stage since the Government negotiated on the basis of appraisal costs which stipulated fixed contract prices. Another firm had to be selected, and the negotiation process recommenced. In retrospect, the Bank should have originally suggested adjustable prices in view of conditions prevailing in Trinidad and Tobago, although Bank policy usually adheres to fixed, lump-sum contracts.

4.03 In October 1980, two months after loan effectiveness, project costs had already risen from the appraised TT\$131 million to TT\$337 million (a 157 percent increase). This enormous increase in project costs created by the delay in reaching effectiveness exacerbated the original financial miscalculations and increased the financing gap faced by the Government of Trinidad and Tobago.

C. Inadequate Staffing of the Project Implementation Unit

4.04 A staffing problem continued over the entire implementation period, delaying implementation that actually took place. Although the PMT/EFMU eventually operated at full capacity, there were difficulties in recruiting sufficiently qualified local staff, because the low salary levels and the temporary nature of the posts militated against the recruitment of personnel. Full staffing of EFMU was not accomplished until the PMT contract was near expiration, so that the counterpart training envisioned at appraisal could not be adequately carried out.

4.05 The rapid turnover of the staff of the EFMU adversely affected the implementation of the project and the unit's ability to efficiently incorporate the training offered by the expatriate PMT. The fact that EFMU had responsibility for several projects in addition to the Third Education Project also adversely affected implementation. During the time that the Third Education Project was to be implemented, the EFMU also had responsibility for, inter alia: (1) the upgrading of denominational secondary

schools in accordance with the National Model; (2) extensions to several government assisted primary schools; and (3) completion of the Short-Term School Building Programme comprising 12 non-project secondary schools. In view of the fact that the Second Education Project also suffered from problems in recruiting and maintaining PIU staff, and from under-staffing due to the PIU's responsibility for several projects, it seems that more adequate measures designed to address the local staffing problem should have been identified during project preparation, and corrective measures taken before the project was presented to the Board.

D. Changes in Government Education Standards

4.06 In 1980, the Ministry of Education revised several fundamental educational standards contrary to Bank advice, presumably to reflect Trinidad and Tobago's improved economic outlook. Primary class size was reduced from 40 to 25 students. The new secondary schools to be built under the project were upgraded to offer five year programs rather than the traditional three year programs. Specifications were raised so that school buildings would: (a) have a minimum life span of 50 years; (b) use more expensive materials in order to reduce maintenance and repair costs; and (c) be designed with collapsible partitions between classrooms.

4.07 These increased standards, although not devoid of benefits, had the effect of increasing the average net and gross school building areas by 27.8% and 37.3% respectively above those set out in the working papers (Annexes 5 and 6). The increases in school building areas and the upgrading of the norms for educational facilities together raised the base cost of the project by 60 percent. The need to redesign elements of the project due to the change in educational policy also led to delays which exacerbated the increased project costs due to inflation. The Bank advised against drastic changes and pointed out that the proposed modifications would increase both capital and recurrent costs. The Government was, however, confident that it could absorb the additional cost, and proceeded with the preparation of architectural designs incorporating the upgraded standards. Later, when economic constraints were beginning to be felt, the Government had to decrease the scope of the project and lower educational standards for facilities. Designs and construction specifications had to be redone, causing delays in physical implementation. Even after the tendering for construction of primary schools, the Ministry of Finance did not approve recommendations for award on the grounds that educational norms and construction standards were still too high, so no primary schools were rebuilt by the project.

E. Indecision on Adjustment of Project Scope

4.08 Further delays in project implementation were caused when the Cabinet ordered substantial revisions in project content (see Annex 7). By May 1981, project costs had increased by approximately 200 percent to TT\$380 million. Due to this dramatic increase in project costs, Cabinet requested (August 1981) the MEC to prepare a reappraisal of the project. The reappraisal prepared recommended the retention of virtually all of the original project components, and was approved by the February 1982 Bank

mission. Because of the death of the Prime Minister (March 1981), the consequent reshuffling of the Cabinet, and the appointment of a new Minister of Education, the reappraisal could not be considered by Cabinet until August 1982 although it was ready in late 1981. By this time (August 1982), the cost of the project had risen to TT\$451 million or about 350 percent of the original estimate.

4.09 The Prime Minister's death had a significant bearing on the subsequent indecision of the Government with regard to project scope. The Prime Minister had exhibited a strong commitment to educational development through his support of the Education Development Plan, and had spearheaded the Government effort to launch the Third Education Project. His death left a vacuum in the Cabinet which contributed to indecision on project reformulation.

4.10 Because of continually escalating project costs and evolving budgetary constraints, Cabinet requested that the MEC revise the project twice from late 1982 to March 1983 in order to bring project costs closer to the originally estimated TT\$131 million. The final reduced project proposal was approved by Cabinet on March 30, 1983 and communicated to the Bank shortly thereafter. Costs were contained to the originally estimated TT\$131 million by decreasing (from 27 to 15) the number of primary schools to be rebuilt, by adding facilities for junior secondary students to an existing secondary school instead of building two new junior secondary schools, and by eliminating the proposed NCTDC, the RTDC and the craft extensions to six senior secondary schools. Implementation of the reduced project was to take place over a three-year period. The Bank was asked to extend the loan closing date to December 1986 in view of Cabinet's decision to limit annual expenditures on primary school construction to US\$10 million.

4.11 The Bank indicated that the revised project was acceptable in principle provided that certain qualitative components were reinstated. ^{2/} The Bank communicated to the Government its policy of only extending the closing date of a loan one year at a time, and designated certain components of the reduced project that had to be implemented by December 1983 in order for the Bank to consider extending the loan to December 1984. In spite of the Government's request to extend the loan closing date to December 1986, the Bank also communicated its intention not to extend the closing date later than December 31, 1985 in view of the continuing lack of progress in project implementation. The Cabinet then deferred a decision on the proposal, pending the report of a working party set up on September 29, 1983. This decision to delay was not communicated to the Bank.

^{2/} The Bank proposed that the implementation of the NCDTC/RTDC be reinstated in order to maintain the qualitative aspects of the project, and that the extension of PMT services be reduced from 90 m/m to 36 m/m since almost all of the preparatory work for project implementation had been completed and extended PMT assistance in all aspects of implementation was therefore unnecessary.

4.12 From May to December 1983, the Bank repeatedly tried to obtain a final Government decision on the status of the project. As late as February 14, 1984, the Government informed the Bank that it was still "following up the matter and would be in touch shortly." On April 4, 1984, the Bank cabled the Government requesting a reply by April 17. In the absence of a Government communication, the Bank cancelled the undisbursed balance of the loan (US\$18,156,411.70) on May 31, 1984, and so informed the Government.

F. Disputed Procurement Procedures

4.13 Of the 37 institutions to be built under this project, only 2 (extensions to existing schools) were actually completed. These were not financed by the Bank due to the Government's noncompliance with the Bank's procurement guidelines. This incident delayed implementation and contributed to the financing gap since the Government entirely financed the construction of these two schools.

4.14 On the premise that this construction was urgent, the Government selected 3 firms from a list of 16 prequalified contractors, invited bids from these 3 contractors (excluding the others), and awarded the contracts. The Bank argued that this procedure: (a) resulted in bids that were not competitive; (b) did not significantly reduce contracting and executing time; and (c) that the criteria for selecting the three contractors were unclear. Several institutions built under the Second Education Project were not financed by the Bank due to the same disputed procurement procedures, so the Borrower was undoubtedly aware that the bidding procedure used was not compatible with Bank Guidelines.

G. Incomplete Communication between the Government and the Bank

4.15 Throughout the period when the loan was effective, communication between the Bank and Trinidad and Tobago was incomplete and continually delayed. Trinidad and Tobago was required to submit Quarterly Progress Reports to the Bank so that issues could be handled speedily. Because of the unexpected cost implications of the project, Cabinet approval was required for each report. This procedure contributed to the slow decision-making of the Government and caused inordinate delays since the Bank was not quickly informed of issues which might have required immediate action.

V. Project Achievements

A. Physical Achievements

5.01 In the sense of physical implementation, project achievements were minimal:

<u>Project Content</u>	<u>Achieved</u>
<u>Part A: Primary Schools</u>	
Building, furnishing and equipping up to 27 primary schools (9,320 places).	Sites secured for 17 schools; preparation of contract documents and bidding for 9 of these built.
<u>Part B: Junior Secondary Schools</u>	
Building, furnishing and equipping two junior secondary schools (2,880 places).	Documentation only completed for site works for the extension to one existing senior secondary school. 3/
<u>Part C: Senior Secondary and Composite Schools</u>	
Building, furnishing and equipping extensions for six senior secondary and two composite schools.	Extensions to two composite schools completed.
<u>Parts D and E: Curriculum and Teacher Development Centers</u>	
Building, furnishing and equipping of one national and one regional center.	Not implemented.
<u>Part F: Technical Assistance</u>	
a) For curriculum and teacher development centers: 2.5 s/y for specialists (S) and 2 s/y fellowships (F).	Not implemented.
b) For technical teacher training: 5.5 s/y (S) and 5.75 s/y (F).	Not implemented.
c) For agricultural teacher training: 1 s/y (S) and 1.5 s/y (F).	Completed.
d) For guidance/counselling: 1 s/y (S).	Completed.

NOTE: s/y = staffyears 3/ : See Government Comments (Attachment I, p. 21)

B. Institution Building

5.02 Despite the meager physical achievements of the project, some important institutional developments were attained (Annex 8).

5.03 Establishment of EFMU. In compliance with Sections 3.02 and 3.03 of the Loan Agreement, the project established within the MEC the Educational Facilities Management Unit which continues to serve in a variety of construction, maintenance, and data gathering tasks. The expatriate PMT partially succeeded in providing project management training for the EFMU staff under difficult circumstances, and left behind a well-prepared handbook on project administration.

5.04 Agricultural Teacher Training. As required by Section 3.05 of the Loan Agreement, arrangements for the training of agricultural teachers have been made at Mausica College, operating as a dependency of the Eastern Caribbean Institute of Agriculture and Forestry. Twenty teachers were trained in 1983-84 and are now in post. Another 20 teachers are currently being trained.

5.05 Guidance and Counselling Services. In accordance with Section 3.05 of the Loan Agreement, specialists contracted under the Loan Agreement trained a total of 70 guidance counselors and teachers who are actively engaged in the education sector.

5.06 Access to Junior Secondary Schools. During the appraisal/negotiation stages of project generation, the Bank urged the Government to reconsider its plan of returning from multishifts to single shifts in the 21 junior secondary schools, since these multiple shifts are designed to ensure secondary school places for all qualified primary school graduates. In light of the accumulated backlog of secondary school construction and the deteriorating economic situation, the Government has decided to defer indefinitely the proposed reduction of shifts in the existing junior secondary schools.

5.07 Construction Standards and Class Sizes. The Government has realized that class size and construction standards need to be modified to maximize cost effectiveness. Primary school classes have been increased in size from 25 to 30, school designs have been simplified, and accommodations have been limited to those that are strictly necessary.

VI. Lessons Learned

6.01 While a number of critical situations that arose during implementation and contributed to the abandonment of the project could not have been foreseen at appraisal -- such as the economic downturn, the decision to upgrade educational standards, and the death of the Prime Minister, there are several areas from which the Bank might draw some useful lessons.

Project Preparation and Country Relations

6.02 The Bank made an extraordinary effort to process this project expeditiously in order to improve its relations with Trinidad and Tobago. This effort resulted in inadequate compliance with normal Bank standards on technical preparation of a project and assessment of a borrower's management capacity, and ultimately led to the failure of the project. Careful project preparation and assessment of the borrower's management capacity should be at an advanced stage before Board presentation. Replacing conditions for Board presentation by conditions for loan effectiveness accelerated approval of this project, but also unfortunately deferred implementation problems to a later stage. Subsequent delays in reaching loan effectiveness proved to be costly to the Government and thus impeded implementation progress. In the long run, the Bank's relations with Trinidad and Tobago would have benefited from a more deliberate and critical approach to project preparation.

Management Capacity of Borrower and Project Complexity

6.03 During project generation and preparation, the Bank should place emphasis on evaluating the borrower's capacity to implement the proposed project with respect to its scope and complexity. The simple provision of project management consultants is not sufficient if a borrower's own management capacity is considerably weak. When a borrower's management capacity is below minimum levels, the Bank should reduce the project scope and apply a detailed institution strengthening strategy, or should formulate the project as an engineering type, preparation loan.

Price Contingencies

6.04 The Bank needs to devise effective guidelines for dealing with price contingencies in volatile economic situations. When borrowers are not accustomed to dealing with inflation, the Bank should explain the need for price adjustment clauses in contracts. Price contingencies should be carefully assessed during appraisal and the reasoning behind the estimates formulated should be clearly documented. When estimated price contingencies are found to be excessive, the Bank should limit the size of the appraised project, or break the project into phases which would be separately approved.

Loan Cancellation

6.05 In cases where implementation is clearly hopeless, the Bank should look for a way to cancel the loan without having to wait for the closing date or trying to persuade the borrower to request a cancellation. The Bank should have acted early and decisively once it had detected the Government's lack of diligence in implementing this project. Instead, the Bank tried too long to salvage the project through adjustment of the project scope, and

subsequently asked the Government to make a request for cancellation. This approach was, however, unsuccessful due to the Government's failure to respond. The only available easy alternative was to await the closing date. This approach did not serve any useful purpose of either the Government or the Bank.

TRINIDAD AND TOBAGO

LOAN 1722-TR

PROJECT COMPLETION REPORT

Evolution of Measured Rates for Construction Trades
(in TT\$)

<u>Item</u>	<u>Unit</u>	<u>1977</u>	<u>1979*</u>	<u>1981</u>	<u>1982</u>	<u>1984</u>
Excavation	cy	7.06	10.85	32.78	39.52	21.35
Concrete	cy	143.68	220.92	347.70	383.48	359.73
Steel Reinforcement	lb	1.05	1.61	2.36	2.42	1.67
Block Work 4 Inches Thick	sy	16.32	25.09	57.74	57.61	48.50
Painting	sy	5.13	7.89	13.24	13.48	9.26

* Interpolated.

Source: Quantity Surveyors Department of the Ministry of Works,
Maintenance and Drainage.

Increases from 1979 to 1981

Excavation	302%	Block Work	230%
Concrete	157%	Painting	168%
Steel Reinforcement	147%		

Note: cy - cubic yard
sy - square yard

TRINIDAD AND TOBAGO

LOAN 1722-TR

PROJECT COMPLETION REPORT

Evolution of Price Indices from Measured Rates

<u>Item</u>	<u>1977</u>	<u>1979*</u>	<u>1983</u>	<u>1984</u>
Excavation	98	151	547	296
Concrete	114	175	304	286
Steel Reinforcement	76	117	175	121
Rough Formwork	73	112	331	151
Block Work 4 Inches Thick	118	181	416	495
Painting	178	197	335	230

* Interpolated.

Source: Quantity Surveyors Department of the Ministry of Works, Maintenance and Drainage.

Increases from 1979 to 1983

Excavation	362%	Rough Formwork	296%
Concrete	174%	Block Work	230%
Steel Reinforcement	150%	Painting	170%

TRINIDAD AND TOBAGO

LOAN 1722-TR

PROJECT COMPLETION REPORT

Real Price Increase per Square Foot Based on Final Cost
for Toco (composite school)*

Final cost of the contract	TT\$7,719,800	
Total gross area built	20,369 sq. ft.	
Final cost of construction per square foot	TT\$7,719,800/20,369 = TT\$379/sq. ft.	
Estimated cost per square feet	as indicated in the working papers	
Base cost buildings	TT\$	88.00
Base cost site work (15%)		<u>13.20</u>
Total base cost	TT\$	101.20
Contingencies		
Physical (10%)		10.12
Price (38.2%)		<u>42.52</u>
Total estimated cost	TT\$	153.84/sq.ft.
Increase of Prices:	(in TT\$)	225.15
	(in %)	246.00

Construction started: June 1982

Construction completed: October 1984

* Includes buildings plus site work.

TRINIDAD AND TOBAGO

LOAN 1722-TR

PROJECT COMPLETION REPORT

Real Price Increase per Square Foot, Based on Final Costs
for Tabaquite (composite school)*

Final cost of the contract	TT\$9,006,413
Total gross area built	19,580 sq. ft.
Final cost of construction per square foot:	TT\$9,006,413/19,580 = TT\$460 sq. ft.
Estimated cost per square feet as indicated in the working papers	
Base cost buildings	TT\$ 88.00
Base cost site works (15%)	13.20
Total base cost	<u>101.20</u>
Contingencies:	
Physical (10%)	10.12
Price (38.2%)	<u>42.52</u>
Total Contingencies	<u>52.64</u>
Total estimated cost	TT\$153.84/sq. ft.
Increase of Prices/Sq. ft. (in TT\$)	306.16
(in Z)	299.00
Construction started: June 1982	
Construction completed: October 1984	

* Includes buildings plus site work.

TRINIDAD AND TOBAGO

LOAN 1722-TR

PROJECT COMPLETION REPORT

Increase of Net Construction Areas in Square Meters

<u>School</u>	As Indicated		Increase in	
	In the Working Papers	In the Original Architect's Brief January 1981	Square Meters	%
A. 1	393.92	474	80.08	20
A. 2	393.92	474	80.08	20
A. 3	471.49	474	2.51	1/2
A. 6	540.65	586	45.35	8
A. 7	540.65	586	45.35	8
A. 8	540.65	772	231.35	43
A. 9	540.65	586	45.35	8
A. 11	629.44	892	262.56	41
A. 13	844.39	1065	220.61	26
A. 14	863.55	1200	336.45	39
A. 15	984.11	1379	394.89	40
A. 18	984.11	1925	940.89	96

Average increase in % = 28.8

TRINIDAD AND TOBAGO

LOAN 1722-TR

PROJECT COMPLETION REPORT

Increase of Gross Construction Areas in Square Meters

<u>School</u>	As Indicated		Increase in	
	In the Working Papers	In the Original Architect's Brief January 1981	Square Meters	%
A. 3	592.52	804.02	211.50	36
A. 7	683.64	844.02	160.38	23
A. 8	683.64	927.00	243.36	36
A. 9	683.64	927.00	243.36	36
A. 14	1139.25	1906.92	767.67	67
C. 1	1420.56	1903.64	483.08	34
C. 2	1420.56	1830.28	409.72	29

Average increase in % = 37.3

TRINIDAD AND TOBAGO

LOAN 1722-TR

PROJECT COMPLETION REPORT

Evolution of Project Content

	<u>SAR</u> <u>1979</u> July	<u>Proposed</u> <u>First</u> <u>Revision</u> <u>1981</u> May	<u>Proposed</u> <u>Second</u> <u>Revision</u> <u>1982</u> November	<u>Proposed</u> <u>Third</u> <u>Revision</u> <u>1983</u> March	<u>Proposed</u> <u>Fourth</u> <u>Revision</u> <u>1984</u> June
Primary Schools	27	24(+3) <u>a/</u>	14	13	13
Junior Secondary Schools	2	—	—	—	—
Extensions to Composite Schools	2	4 <u>b/</u>	3	3	3 <u>c/</u>
Extensions to Senior Secondary Schools	6	6 <u>a/</u>	—	—	—
NCIDC	1	1 <u>a/</u>	— <u>d/</u>	— <u>d/</u>	1 <u>e/</u>
RTDC	1	1 <u>a/</u>	— <u>d/</u>	— <u>d/</u>	1 <u>e/</u>
Technical Assistance: Specialists	120s/m	120	120	62	68
Fellowships	111s/m	111	111	79	82
PMT	120s/m	140	210	210	156
Estimated Cost: TT\$	131.1	393.0 (250+143 <u>a/</u>)	149.0	131.0	131.0 <u>f/</u>
US\$	54.6	163.8 (104.2+59.6 <u>a/</u>)	62.1	54.6	54.6 <u>f/</u>

Total Costs (August 1983): TT\$451.0

US\$187.9

Notes:

Between loan signing and loan effectiveness (July 1979 to August 1980) estimated project costs escalated from TT\$131.1 million (US\$54.6 million) to TT\$337 million (US\$140.4 million).

- a/ The proposed revision suggested that the project be implemented in two phases. Items marked a/ to be deferred to second, post-1985, phase under a follow-up project. It should further be noted that between May 1981 and August 1982, overall estimated project costs increased from TT\$393 million (US\$163.8 million) to TT\$451 million (US\$187.9 million).
- b/ One new composite school and an extension to one existing senior secondary school to form a composite school in place of the two junior secondary schools originally planned (change in government education policy).
- c/ Fees, furniture and equipment only. Bank declined to finance civil works because of unacceptable tender procedures.
- d/ Some technical assistance included to prepare briefs for National Curriculum and Teacher Development Center, and Regional Teacher Development Center.
- e/ Construction costs from savings on construction of two composite school extensions (see c/ above).
- f/ Increased to TT\$144 million (US\$60 million) in MEC proposal to Cabinet (June 1983), to include construction costs of extensions to composite schools (see d/ above).

TRINIDAD AND TOBAGO
LOAN 1722-TR

PROJECT COMPLETION REPORT

Compliance with Loan Agreement Covenants

<u>Loan Agreement Section</u>	<u>Conditions</u>	<u>Status</u>
3.02(a)	Establish and maintain the project implementation unit (EFMU).	Done.
3.02(b)	Staff EFMU adequately at all times.	Not done adequately.
3.03	Employ project management team (PMT).	Done.
3.04	Employ project architectural and engineering consultants.	Done only for engineer.
3.05	Negotiate agreement between the Ministry of Education (MEC) and (a) Ministry of Agriculture for training of agricultural teachers; (b) religious authorities for joint management of project schools; and (c) University of West Indies (UWI) for establishment of diploma courses in guidance and counselling.	Done.
3.06	Take action to assure access to junior secondary schools for all eligible primary school graduates.	Not done.
3.07	Revise curricula and organize inservice training courses for primary and secondary teachers.	Done partly.
3.08	Establish formal procedures for continuous review of architectural designs, and furniture and equipment lists.	Not done.
3.09	Review and update project implementation schedule.	Done.
3.12(a)	Keep Bank informed of progress in the educational sector.	Done.
3.12(b)	Review the results of guidance and counselling training and curriculum development with the Bank periodically.	Done partly.
3.12(c)	Evaluate the craft courses offered in senior secondary schools.	Not done.
3.13	Acquire sites for schools.	Done partly.
3.14	Select remaining denominational schools.	Done partly.

COMMENTS FROM THE BORROWER

ATTACHMENT I

ZCZC 00516416 WUI439
DEDDD
REF : TCP FCA _____

WUI439
22549 TRINIG0 WG

NO. 478 - FOLLOWING FOR MR. YUKINORI WATANABE, DIRECTOR,
OPERATIONS EVALUATION DEPARTMENT INTERNATIONAL BANK FOR RE-
CONSTRUCTION AND DEVELOPMENT FROM PS/MINISTRY OF EDUCATION

REFERENCE PROJECT COMPLETION REPORT ON JRD EDUCATION PROJECT
DATED 26.9.85. AGREE WITH BOARD PRINCIPLES. CORRECTIONS
FOLLOW, PAGE 7, SECTION 4.08 PRIME MINISTER DIED MARCH 1981.

PAGE 9 PART B DOCUMENTATION ONLY COMPLETED FOR SITE WORKS
EXTENSION ONE SENIOR SECONDARY SCHOOL.

ANNEX 1 AND 2 MINISTRY OF WORKS, MAINTENANCE AND DRAINAGE.

REGARDS,

22549 TRINIG0 WG
22549 TRINIG0 WG

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