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CARIBBEAN DEVELOPMENT BANK



**PROJECT COMPLETION VALIDATION REPORT
WITH MANAGEMENT RESPONSE (APPENDIX I)**

**ENHANCEMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING –
GUYANA**

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**OFFICE OF INDEPENDENT EVALUATION
JANUARY 2023**

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PROJECT COMPLETION VALIDATION REPORT

**ENHANCEMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING –
GUYANA**

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**OFFICE OF INDEPENDENT EVALUATION
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CURRENCY EQUIVALENT

Dollars (\$) throughout refer to United States dollars (USD) unless otherwise stated.

USD1.00 = GYD 200
GYD1.00 = USD 0.005

ABBREVIATIONS

CBET	Competency Base Education and Training
CDB	Caribbean Development Bank
CTVET	Council for Technical and Vocational Education and Training
DRMS	Database Records Management System
ETVET	Enhancement of Technical and Vocational Education and Training
GITC	Guyana Industrial Training Centre
GOYD	Government of Guyana
GUY	Guyana
GTEE	Guyana Technical Education Examination
GTI	Guyana Technical Institute
HDI	Human Development Report Index
HIPC	Heavily Indebted Poor Country
IDC	Interest During Construction
ITCs	Industrial Training Centres
LTI	Linden Technical Institute
LTVTC	Leonora Technical Vocational Training Centre
M&E	Monitoring and Evaluation
MOE	Ministry of Education
mn	million
MTVTC	Mahaicony Technical and Vocational Training Centre
n.a	Not Applicable
p.a.	per annum
PC	Project Coordinator
PCR	Project Completion Report
PMU	Project Management Unit
SFR	Special Funds Resources
TI	Technical Institute
TVET	Technical and Vocational Education and Training
USD	United States Dollars

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PROJECT SUMMARY

1. In April 2009, CDB approved a loan in the amount of seven million five hundred thousand United States dollars (USD7.500 mn) to the Government of Guyana (GOGY) to contribute to sustainable economic and social development through increased productivity. GOGY contributed Counterpart Resources of USD2.122 mn.

PROJECT OBJECTIVES

2. The project's overall objective was to foster an enhanced Technical and Vocational Education and Training (TVET) system. The intended results of the project were: (a) modern and well-equipped Technical Institutes (TIs) in Regions 3 and 5; and (b) an institutional framework for the development of the TVET sub-sector.

PROJECT BACKGROUND

3. GOGY indicated its intention to undertake a comprehensive reform of the TVET sub-sector as part of a wider strategy to provide the skills necessary to drive the economy. Skill shortages in key industries, brought about by wide-scale emigration and the inability of the system to respond adequately to growing demands, were likely to impede growth and reduce competitiveness. High-quality output from TVET institutions was viewed as critical in filling the needs gap.

4. The reform programme sought to address several constraints in the current system that negatively impacted the quantity and quality of training offered. These issues are related to almost all aspects of the TVET system, including management and administration, curriculum offerings, programme delivery and access. A few government-financed initiatives aimed at addressing some of these had been ongoing for some time but progressed very slowly. One example was the passage of the TVET Act that facilitated the formulation of the National Council for TVET. However, due to resource constraints and the absence of a clear strategic direction, the Council could not perform its functions adequately. Therefore, the government sought to accelerate the pace of reform of the TVET sector with financial support from the CDB.

5. The Enhancement of the TVET project aimed to increase equitable access to TVET and improve the system's capacity to deliver high-quality and relevant programmes. The project financed the construction of two new TIs and provided equipment for the programmes to be offered, including the programme for technical teacher training. The project financed training for management and teaching personnel and helped to strengthen the system for curriculum development, testing and certification, and the development of operational and maintenance plans.

EVALUATION CRITERIA

6. The assessment focused on the project's relevance, effectiveness, efficiency, and sustainability and CDB's and Borrower's performance.

Relevance

7. The Project Completion Report (PCR) rates Strategic and Poverty Relevance as Highly Satisfactory. The PCR states that the project was highly relevant, and GOGY recognized the importance of developing its human capital in transforming the economy and society and embarked upon a programme of improving learning outcomes in the TVET sub-sector. The project was seen as a high priority by GOGY as

it supported the goals of the Education Strategic Plan 2008-2012. Considering the previous, the Evaluator concurs with the PCR's rating of **Highly Satisfactory**.

Effectiveness

The PCR gives a rating of **Marginally Unsatisfactory** for Effectiveness. The two outcome indicators (Table 3) were not achieved by the end of the project. The outcome indicator "95% student graduation rate from TIs in Regions 3 and 5 by 2012" was not met because the construction of the TIs was completed 2 years later than the initial plan. The other outcome indicator "at least 400 full-time male and female students access quality training at TIs in Region 3 and 5" was partially achieved in 2012 with 191 students enrolled. There were no significant variations to be reported in terms of measurement of outputs, despite many being realised later than initially planned. These delays impacted the achievement of the expected outcome. The Evaluator concurs in rating this criterion as **Marginally Unsatisfactory**.

Efficiency

9. The PCR assesses the cost efficiency of the project as **Satisfactory**. It refers to the Economic Rate Return (ERR) estimation of the project benefits. The model assesses the benefit of implementing fully operational TVET institutes across the two Regions 3 and 5 regarding the youth unemployment and the associated economic savings. To enable this assessment, an estimate was made of graduates and youth unemployment rate without the project. According to the PCR, some items were more costly than envisaged at appraisal, but prudent management led to savings on other items. The PCR stated that the implementation of fully operational TVET institutes across Regions 3 and 5 concerning the potential for a reduction in youth employment far outweighed the costs, even though delays affected the delivery of outputs. The ERR was estimated at 21%, well above the CDB cut-off rate of 12%.

10. The PCR indicates there was no additional loan and the total sum of money disbursed for project completion was 7.423 mn, which was slightly less than the approved loan of 7.5 mn. This indicates the money was spent within the project cost budget.

11. Overall, project implementation suffered delays of about one year and two months and was completed approximately 47 months after the original expected date.

12. By referring to the quantitative assessment (ERR) as suggested by the Performance Assessment System (PAS) Manual 2013, the Evaluator rates this criterion as **Satisfactory**.

Sustainability

13. The PCR rates the sustainability of the project as **Satisfactory**. It states that GOGY has demonstrated a commitment to TVET by increasing budgetary support and enacting legislation to establish the Council for TVET.

14. The Appraisal Report (AR) indicates that sustaining project objectives beyond the implementation period depended on the performance of key institutions such as the Council for TVET and the GTI Teacher Training Unit. These institutions benefited from significant technical assistance (TA) under the project. However, facility maintenance has been a critical issue in Guyana. This risk was mitigated by developing maintenance plans within the overall Operational Plans of TIs, which helped imbue a culture of maintenance within these institutions. It was also expected that students would undertake some annual plant maintenance s as an element of course work.

15. Based on the previous, the Evaluator rates Sustainability as suggested by the PAS Manual 2013; as **Satisfactory** and in concurrence with the PCR rating.

Performance of the Borrower and Executing Agency

16. The PCR rates the performance of the Borrower/Implementation Agency as **Marginally Unsatisfactory**. According to the PCR, despite the fact that Project Management Unit (PMU) Officers were not trained in TVET, they executed their tasks satisfactorily. Implementation of the pedagogical activities was led by CTVET as a responsible actor for TVET in Guyana, reporting directly to the Ministry of Education (MOE). On some occasions, this arrangement caused misunderstandings and, consequently, delays since CTVET leadership was very experienced and showed some resistance to receiving guidance from PMU personnel. The Evaluator rates the Borrower's performance as **Marginally Unsatisfactory** due to its failure to fully comply with most of the PAS Manual 2013 criteria, especially concerning the effective coordination and cooperation of implementing agencies in the engagement with stakeholders and boundary partners, and gaps in compliance with terms and conditions and procurement guidelines. This is also raised in the PCR as it led to delays in the completion of the project.

Performance of the Caribbean Development Bank

17. The PCR provides a self-assessment rating of CDB's performance as **Satisfactory**. The justification for the rating is that the extra presence of supervision led to a greater level of support for MOE which generated additional outputs such as voluntary work from the Project Coordinator and the Finance Officer after the PMU was closed. CDB managed the relationships between the Council for TVET and PMU in the cases where CTVET was reluctant to accept PMU's guidance. The support provided by CDB helped to mitigate delays in project implementation. Furthermore, the PCR stated that the stakeholders were pleased with CDB's guidance. In light of the previous, the Evaluator concurs with the **Satisfactory** rating.

OVERALL ASSESSMENT

18. The PCR rates the overall performance of the project as **Satisfactory**. The Evaluator also rates the overall project performance as **Satisfactory**. This rating is based on an arithmetic average of the total scores from separate assessments of the four core criteria: Relevance (Highly Satisfactory); Effectiveness (Marginally Unsatisfactory); Efficiency (Satisfactory); and Sustainability (Satisfactory).

19. Details of the ratings and justification for differences between the PCR and Evaluator are summarised below.

**SUMMARY RATINGS OF CORE EVALUATION CRITERIA AND OVERALL ASSESSMENT
OF THE PROJECT**

Criteria	PCR⁶	OIE Review	Reason, if any, for Disagreement/Comments
Relevance	Highly Satisfactory (4)	Highly Satisfactory (4)	
Effectiveness	Satisfactory (3)	Marginally Unsatisfactory (2)	Failure to meet completion dates which undermined outcomes achievement
Efficiency	Satisfactory (3)	Satisfactory (3)	
Sustainability	Satisfactory (3)	Satisfactory (3)	
Composite (Aggregate) Performance Rating	Satisfactory (3)	Satisfactory (3)	
Borrower Performance	Marginally Unsatisfactory (2)	Marginally Unsatisfactory (2)	
CDB Performance	Satisfactory (3)	Satisfactory (3)	
Quality of PCR	NA	Satisfactory (3)	

Lessons:

The PCR identified five lessons learned from the implementation of the project as follows:

- (a) Student enrolment rate threshold should be considered as an outcome: there must be an accompanying public education programme to build awareness. When surveyed, many persons indicated they were not aware of the new institutions and, therefore, they had not applied.
- (b) Public communication programmes are necessary to further encourage enrolment in non-traditional areas. Many parents surveyed had negative views of their children's participation in non-traditional areas. A number had also visited the new TIs seeking information about traditional areas of study for their daughters.
- (c) Inclusion of childcare facilities may encourage greater enrolment of young females who are parents. They would be able to have their children taken care of while attending classes. As a value-added, a childcare programme could be offered as one of the courses in the institution.
- (d) Providing appropriate technical support to project implementation is crucial. During project preparation, CDB secured expert services in TVET to guide the provision of the quality enhancement component of the project. The project also provided technical assistance support to implement several key activities.

- (e) Enhance the impact of the intervention by ensuring gender mainstreaming. At the time of the Project Appraisal, CDB was in the early stages of anchoring gender equality in Projects. This is mirrored in the project design. The project did not consider differences between male and female students in the education system and did not plan to collect disaggregated gender data for monitoring and evaluation purposes. Therefore, to enhance and monitor development effectiveness, it is critical to consider gender throughout the entire project cycle.

1. BASIC PROJECT DATA

Project Title	Enhancement of Technical and Vocational Education and Training
Country	Guyana
Sector	Education
Loan No.	18/SFR-GUY
Beneficiary	Government of Guyana (GOGY)
Implementing/Executing Agency	Ministry of Education (MOE)

<u>Disbursements (\$ mn)</u>	<u>OCR</u>	<u>CDB LOAN</u>	
		<u>SFR</u>	<u>Total</u>
Loan Amount	n.a	7,500,000	7,500,000
Disbursed	n.a	7,423,394	7,423,394
Cancelled	n.a	0	0
<u>Project Milestones</u>	<u>At Appraisal</u>	<u>Actual</u>	<u>Variance (months)</u>
Board Approval	December 10, 2008	April 27, 2009	(4)
Loan Agreement signed	April 27, 2009	April 27, 2009	(0)
Loan Effectiveness ¹	June 26, 2009	May 21 2010	(11)
<u>CDB Loan</u>	<u>At Appraisal</u>	<u>Actual</u>	<u>Variance (months)</u>
First Disbursement Date	May 21, 2010	June 15, 2010	(1)
Terminal Disbursement Date	December 31, 2010	December 31, 2014	(48)
TDD Extensions (number)	-	5	5
<u>Project Cost and Financing (\$ mn)</u>	<u>At Appraisal</u>	<u>Actual</u>	<u>Variance (mn)</u>
CDB Loan	7,500,000	7,423,394	(77,364) thousand
Counterpart	2,200,000	2,122,000	(78,000) thousand
Total	9,700,000	9,623,394	(77,394) thousand
<u>Implementation</u>	<u>At Appraisal</u>	<u>Actual</u>	<u>Variance (months)</u>
Start Date ²	April 27, 2009	June 30, 2010	(14)
Completion Date	July 31, 2011	June 30, 2015	47
Implementation Period (years)	2.3	5	33 (months)

¹ Date Conditions to First Disbursement satisfied.

² Implementation begins with signing of Loan Agreement

2. PROJECT DESCRIPTION

Rationale (context at appraisal)

2.01 The education system in Guyana evolved rapidly over the last two decades with many notable achievements. Among these was the provision of free access to formal basic education for all. Under a free education policy, the Government of Guyana (GOGY) is committed to offering each person the opportunity to be educated at no cost to that individual. Despite major achievements, several key challenges remained at all levels of the system: poor quality of educational services and standards, weak institutional capacity to manage the system, and low performance levels, particularly literacy and numeracy. At appraisal, attrition among teachers was high, and about 42% of those remaining were untrained or unqualified. The Technical and Vocational Education and Training (TVET) sub-sector was also confronted by myriad challenges, including the following: limited access to TVET services across Guyana; poor quality of TVET services; shortage of qualified staff at all levels of the TVET system; inadequate teaching materials and equipment; poor physical conditions of the plant of existing TIs; the limited focus of the majority of curricula, and poor performance of students.

2.02 Despite these challenges, GOGY's existing policy recognised TVET as an essential component of the country's human resource development and a critical contributor to economic growth. It highlighted the need for improved workforce capability; increased productivity; provision of trained manpower to support planned investments and economic development; greater emphasis on science and technology; computer literacy; and increased utilisation of the Industrial Training Centre (ITC).

2.03 Economic decline had led to chronic under-financing of education and training and significant losses of teaching personnel through migration, steadily eroding the effectiveness of TVET in Guyana. Inadequate facilities and equipment and, in some cases, obsolete curricula and training methodologies severely diminished the ability of the TVET subsector to provide the trained workforce required to support and expand industry or promote small business development. There was a need for GOGY to modernise the TVET system within a framework of a clear policy and strategic plan to meet the emerging labour market demands and to provide competency-based modular training programmes to meet regional and international standards. GOGY was under pressure to provide adequate physical facilities and, in cooperation with the private sector and regional communities, develop mechanisms to regularly assess labour market needs and establish and manage training systems that can respond rapidly and flexibly.

2.04 In recognition of the critical role of TVET in economic transformation, the Government espoused a policy of providing at least one Technical Institute (TI) in each Region. In particular, GOGY had identified Regions 3 and 5 as critical zones for industrial development. Due to the lack of services in those Regions, young men and women were required to seek TVET facilities and services in other Regions. Therefore, the need to provide TVET facilities in these Regions to support the projected economic activity became more critical.

Expected Impact

2.05 The project was expected to contribute to sustainable economic and social development through increased productivity and a decrease in youth unemployment levels by 2015.

Objectives or Expected Outcomes

2.06 The project's overall objective was to provide an enhanced TVET system with the capacity to provide relevant and effective education and training.

Components and/or Outputs

Components

2.07 The Project consisted of the following components:

(a) *Increasing access to quality TVET Programmes.* This component aimed to increase access to TVET through the construction of TIs in Regions 3 and 5 which lacked such facilities. The new facilities were intended to accommodate approximately 200 full-time students each, while arrangements were designed to provide part-time training opportunities to employed persons. Appropriate equipment was planned to be equipped to deliver nine technology-related programmes.

(b) *Enhanced institutional framework for TVET and improved teacher quality.*

This component comprised the two following sub-components:

- (i) *Strengthen the institutional capacity to manage TVET systems and processes;*
- (ii) *Train administrative staff and TVET instructors.*

These two sub-components are complemented by efforts aimed at improving the quality of TVET. The project provided short term training, including attachments to regional institutions for a minimum of 22 TI instructors and local training in pedagogy of at least 125 technical instructors. The project intended to engage consultants to work with counterparts located at the Council for TVET in planning and implementing some of the key programmes of the Council.

Outputs:

(1) The planned outputs were the following: *Modern and well-equipped TI in Regions 3 and 5*

- (a) Construction and equipping of two TIs by August 2010.
- (b) Provision of equipment for 3 selected TIs by September 2011.

(2) *Institutional framework for the development of the TVET sub-sector:*

- (a) Teacher training programme developed by December 2009.
- (b) Standards for key occupational activities developed by December 2009.
- (c) Equipment provided to 3 existing TIs by December 2009.
- (d) 125 instructors and 25 teachers trained by 2010.
- (e) Competency framework developed for seven occupational areas by March 2010.
- (f) TVET Strategic Plan adopted by March 2010

Provision of Inputs

2.08 In December 2008, CDB approved a Loan in the amount of USD7.5 million (mn) to GOGY to assist in sustainable economic and social development through increased productivity. There was no additional Loan, and the Terminal Disbursement date was set in December 2014. The total amount of funds distributed throughout the project was USD7,423,394. The counterpart contribution was USD2.20 mn. The tabulated summary of the project cost and financing plan estimated at appraisal is presented in Table 1 below.

**TABLE 1: SUMMARY OF PROJECT COSTS AND FINANCING
ESTIMATED AT APPRAISAL³
(\$'000)**

Item	CDB SFR		CDB % Difference	Counterpart		Counterpart % Difference
	Planned USD000	Actual USD000		Planned USD000	Actual USD000	
1.	Land	-	-	444	410	-7.7
2.	Building and Civil Works	3,678	3,818	828	509	-38.5
3.	Tools, workshop equipment and learning materials	1,760	2,430	-	-	-
4.	Furniture and fixtures	196	704	-	-	-
5.	Institutional Strengthening	231	251	43	8	-81.4
6.	Training	215	89	-	-	-
7.	Design Services and Construction Supervision	-	-	276	370	34.1
8.	Project management	-	-	250	526	-110.4
Sub-Total Base Cost		6,080	7,292	1,841	1,823	-1.0
9.	Physical Contingency ¹⁾	695	0	157		100.0
10.	Price Contingency ²⁾	593	0	124		100.0
11.	Interest During Construction (IDC)	132	0	-	-	-
Total Project Cost:		7,500	7,292	2,122	1,823	-14.1

Implementation Arrangements

Executing Agency

2.09 The Ministry of Education had overall responsibility for administering and managing all aspects of the project.

Identification of Risks and Mitigation Measures⁴

2.10 One of the most significant risks identified at appraisal was the weak policy and regulatory framework, which could frustrate the reform of TVET in Guyana. The project sought to mitigate this risk by implementing substantial TA to the TVET Council that aimed to strengthen its capacity to govern and regulate the sub-sector. Additionally, the project planned to increase the staff complement to allow the Council to discharge its essential functions.

2.11 Another risk was the realisation of overall project goals, which could be compromised by the mismatch between the training offered by the sub-sector and the market's needs. GOGY gave priority to the institutionalisation of a labour market research system that continuously monitored the needs of industry and the wider economy. This system, which was funded by external donor agencies, was an integral activity of the Education Strategic Plan 2008-2012.

³ Appraisal Document Page 89.

⁴ Appraisal Document Page 42.

2.12 “Maintenance of the facilities, which could be compromised by the inability of GOGY to provide adequate resources” was also identified. The project had undertaken the necessary steps to help partially mitigate this risk through the use of institutional strengthening activities, which assisted GOGY with the development of Operational Plans. These plans included Maintenance Plans for the facilities. GOGY envisaged that through annual plant maintenance, which the students of the TIs would carry out as an element of their course work, this initiative would lead to skill development and employment.

2.13 According to the PCR under the Risk Assessment, none of the risks identified at appraisal materialized. It is still to be seen whether the recommendations proposed in the Maintenance Policy and Plans for the individual TIs, which were developed as part of the project, will be carried out in the future.

3. EVALUATION OF DESIGN AND IMPLEMENTATION

Relevance of Design and Formulation

3.01 At appraisal, the revitalisation and modernisation of curricula at all levels were recognised as critical to ensuring the relevance of training to the needs of the labour market. The AR indicated that TVET programmes needed to be sufficiently aligned with, and be responsive to, the current realities of the workplace both in terms of the skill requirements and the level of technology involved.

3.02 The PCR states that at appraisal, the TVET System would play a major role in ensuring optimal balance between theoretical and practical training. However, this objective was unlikely to be met due to the generally poor state or absence to which the practical aspect of the given curricula was based. Programme delivery did not embrace the new technologies in the workplace. The system failed to provide TI graduates with the appropriate, necessary practical skills and an introduction to new technologies to enable them to function effectively in the modern workplace.

3.03 The AR indicated that for TVET to remain relevant, the TVET curriculum development process would have needed to be responsive to the dynamism of modern industry and business and the needs of the increasing number of persons aspiring to become self-employed. For this reason, the participation of the private sector on TVET committees was vital, so was its involvement in curriculum decision-making and implementation.

Project Outputs

3.04 At appraisal the project was expected to be implemented over a period of approximately 30 months from April 27, 2009 to July 31, 2011. Key assumptions of the schedule included the length of time required to satisfy conditions precedent and the construction period(s) for TIs. The CDB loan was expected to have been fully disbursed by December 31, 2010. The PCR indicates that the project was implemented over five years, from June 30, 2010 to June 30, 2015, and that the CDB loan was fully disbursed by December 31, 2014 (approximately 48 months behind schedule).

3.05 The PCR assesses the project’s performance in terms of achievement of outputs as Satisfactory. It indicates that civil works were completed at both sites, and both TIs were operational. However, adjustments were made to convert rooms to accommodate libraries since library space had been left out of the designs.

3.06 The PCR states that outputs achieved for Component 1, “Improving Access to Quality TVET”, were Unsatisfactory. This was most likely due to the difference in the planned and actual outputs, mainly the completion dates of the two TIs that were finished almost one and a half years later than initially planned.

3.07 The PCR mentions that the output achieved for Component 2, “Enhancing the capacity of TVET System”, was **Satisfactory**. This was due to Teacher training not commencing when it was planned because many of the persons already assigned to teach lacked the requisite matriculation. To overcome this problem, the MOE and CTVET waived the matriculation requirements for persons already in the system to access training. In addition, it was agreed that the training would be carried out at GTI, which possessed the equipment for the practical aspects of the training (having been outfitted with the technology lab), but it would be done under the auspices of the Cyril Potter Teachers’ College, the only entity in the country authorized to train teachers. Training, therefore, commenced in 2014 rather than in 2010 as expected.

3.08 Project management has been considered adequate by the PCR, despite underlined tensions between the CTVET and PMU.

3.09 Based on a review of the information available on CDB’s Registry files and PSRs, the Evaluator concurs with the findings of the PCR in respect of the implementation of the project. Most of the expected outputs were completed, albeit over a protracted period, 48 months beyond the scheduled completion date.

Table 2: Matrix of Project Outputs

No.	Planned Outputs at Appraisal	Outputs Achieved (at project end)	Evaluator’s Rating
1.	Improving Access to Quality TVET		US
	(a) Construction and equipping of 2 TIs by August 2010. (b) Provision of equipment for 3 selected TIs by September 2011.	(a) The two new TIs were constructed and equipped with the relevant workshops, tools, equipment, learning materials and furniture and fixtures, by during the first quarter of 2012. (b) Equipment was provided to the three selected TIs – Guyana Technical Institute (GTI), Guyana Industrial Training Centre (GITC) and New Amsterdam Training Institute (NATI) as scheduled.	
2.	Enhancing the capacity of TVET System		S
	(a) Teacher training programme developed by December 2009. (b) Standards for key occupational activities developed by December 2009. (c) Equipment provided to 3 existing TIs by December 2009. (d) 125 instructors and 25 teachers trained by 2010. (e) Competency framework developed for seven occupational areas by March 2010.	(a) Curriculum for the Technical Teacher Training Programme was developed by February 2011. (b) Council for TVET Regional Occupational Standards were acquired and amended to match the needs of the local TIs by December 2009. (c) Tools and equipment were procured for three existing Technical Institutes by (GTI, GITC and NATI). (d) Short term professional development completed by August 2013, but initial teacher training not undertaken mainly because of issues with persons assigned to classrooms not meeting matriculation requirements. Training commenced in 2014. (e) The competency framework for the occupational areas was developed by April 2011 and is in use.	

No.	Planned Outputs at Appraisal	Outputs Achieved (at project end)	Evaluator's Rating
	(f) TVET Strategic Plan adopted by March 2010.	(f) TVET Strategic Plan was formulated in 2013 and accepted by the Ministry of Education. It has been incorporated into the new Education Sector Strategic Plan of the Ministry of Education.	
Overall Rating			MUS

Project Cost, Disbursements, Borrower Contribution and Conformance to Schedule

Project Cost

3.10 The PCR provides a matrix of project cost and a financing plan that shows a minor difference between the appraised and actual costs, equal to -2.77% (USD - 0.208). However, it indicates an increase in the cost of the “Tools, workshop equipment and learning materials” equal to 38% (USD 0.670 mn). According to the PCR, a variation in the total expenditure for component 2 equal to -23.8% (USD -0.106mn) was due to:

- (a) The need to undertake a geotechnical investigation increased cost.
- (b) Inadequate design of electricals to accommodate the equipment in the various labs.
- (c) Omission of key items from bills of quantity.
- (d) Higher prices from the excess demand for construction material.

3.11 Without accounting for the variation in costs approved, the estimated cost of the project at appraisal was USD9.7 mn, and the actual cost was USD9.622 mn, with a variance of -4.67%. However, the disbursement amount was equal to USD7.42 mn. A summary of project costs/commitments and the financing plan is presented in table 1 summary of project costs and financing estimated at appraisal.

Disbursements

3.12 At appraisal, the first disbursement was planned for May 21, 2010, and the Loan was intended to be fully disbursed by December 31, 2010. According to the PCR, the first disbursement was made on June 15, 2010 (1 month late) and the last disbursement was made on December 31, 2014 (48 months later than planned). The Terminal Disbursement Date (TDD) was extended five times.

Borrower Contribution

3.13 GOGY's contribution was **Marginally Unsatisfactory**; the officers in the PMU were not trained in TVET but executed their tasks satisfactorily. Implementation of the pedagogical activities was led by CTVET, which is responsible for TVET in Guyana, reporting directly to the Minister. This arrangement sometimes caused delays in implementation because of the tensions between the CTVET leadership and PMU supervision. In addition, before the establishment of the PMU, the MOE officer supervising the preparatory activities approved the waiving of geotechnical investigations. Unfortunately, one of the selected sites wasn't suitable for the construction work. Consequently, the design was modified accordingly, leading to time delays and increased costs. Soon after the PMU ended its activities, the MOE effectively executed the two remaining activities.

Conformance to Schedule

3.14 At appraisal, the Loan was planned to be implemented, commencing in April 2009 and ending in July 2011. The PCR states that the project was started on June 2010 (14 months later than planned), and it was completed 47 months later, in June 2015.

Implementation Arrangements, Conditions and Covenants and Related TA.

Implementation Arrangements

3.15 The project was implemented by a Project Management Unit (PMU). A Project Coordinator (PC) was appointed by GOGY and was responsible for the daily management of project activities. The PC was directly responsible for managing the implementation of the project's institutional strengthening and training activities, which included procurement of the engaged consultants. The project also used a Project Coordinator Civil Works (PCCW), which was responsible for the overall coordination of the building and civil works component and the procurement of furniture, tools and equipment. The PCR stated that the PMU worked well, and voluntary services were provided by Project Managers. However, it was reported that there was an underlying tension between CTVET and the PMU because of the latter's lack of technical expertise in TVET.

Conditions and Covenants

3.16 The compliance of the Borrower/Executing Agency with the conditions of the Loan Agreement was achieved in May 2010 rather than June 2009 as scheduled at appraisal. The PCR did not indicate the shift in time.

Contractor/Consultant Performance

3.17 According to the PCR, the Consultants performance was **Satisfactory**. The contractor executed the building works competently, even when there were variations resulting from inadequate designs, and the work of the institutional strengthening consultants was effectively delivered.

3.18 However, the PCR stated also that (in the absence of PMU supervision) the design and supervision consultants committed a major error by not undertaking geotechnical evaluations before completing the designs for Region 5. It turned out that the sub-structure design was unsuitable for the soil type at the location. Therefore, the sub-structure design was modified with considerable delay and additional costs.

Monitoring and Evaluation Design, Implementation and Utilisation

3.19 The AR specifies the list of reports to be prepared during and after the project implementation. These reports included monthly progress reports, tender evaluation reports by PC, quarterly reports on investments, contract completion reports, annual maintenance plans, PCR prepared by PC, other consultant reports and annual reports indicating programme offerings, number of students, and student performance data disaggregated by gender, which have been submitted by TI. GOGY developed a Monitoring and Evaluation (M&E) system, including an action plan to monitor and report on the implementation of the PRSP and attainment of the MDGs. The M&E system involved entities like the M&E unit in the Office of the President of Guyana, a joint civil society and Government National Steering Committee, Ministerial Focal Points, Thematic Groups and PRSP Regional Committees. The unit prepared annual progress reports on PRSP for 2002-2003 and 2005. In 2005 the M&E report indicated that several social and economic policy reform measures were on track, but that implementing some aspects of the poverty programme had proven to be very challenging. The report identified challenges in building national consensus and cohesion; weak implementation capacity at the national and regional levels; unavailability of concessionary funding;

weak performance of the global economy, and the impact of natural hazards and disasters as the major risks to the achievement of the country's poverty and human development goals.

3.20 CTVET recognized the importance of having a monitoring and evaluation system. They insisted that undisbursed funds were used to acquire a system to connect all TIs and make student data available across the system. Additionally, the PMU always kept CDB informed about the project's status.

4. EVALUATION OF PERFORMANCE (PCR ASSESSMENT AND VALIDATION)

4.01 The following are the ratings of the PCR and PSRs over the project implementation period and the Evaluator's ratings based on the data reviewed.

Relevance

4.02 The PCR rates Strategic and Poverty Relevance as **Highly Satisfactory**. The PCR states that the project was highly relevant because GOGY recognized the importance of the development of its human capital in the transformation of the economy and society and embarked upon a programme of improving learning outcomes in the TVET sub-sector. The project is seen as a high priority by GOGY as it supports the goals of the Education Strategic Plan 2008-2012.

4.03 The PCR further indicates that the project is critical in improving the quality and relevance of technical education and, therefore, the productivity and employability of beneficiaries, particularly young unemployed men and women in rural communities. Considering the previous, the Evaluator concurs with the PCR's rating of **Highly Satisfactory**.

Effectiveness

4.04 The PCR gives a rating of **Marginally Unsatisfactory** for Effectiveness. The two outcome indicators (Table 3) were not achieved by the end of the project. The outcome indicator "95% student graduation rate from TIs in Regions 3 and 5 by 2012" was not met because the construction of the TIs was completed 2 years later than the initial plan. Between 2012 and 2016, only 56.8% of students (around 40% less than the target indicator) were enrolled in the two Tis. The other outcome indicator "at least 400 full-time male and female students access quality training at TIs in Region 3 and 5" was partially achieved in 2012 with 191 students enrolled. However, the enrolment data shows that a few years after the end of the project in 2016/2017 and 2017/2018, target expectations were fully met or exceeded, with 433 and 490 enrolled students. There were no significant variations to be reported in terms of measurement of outputs, despite many were realised later than initially planned. These delays impacted the achievement of expected outcomes. Given these premises, the Evaluator rates this criterion as **Marginally Unsatisfactory**.

Table 3: Matrix of Project Outcomes

No.	Planned Outcomes at Appraisal	Outcomes Achieved (at project end)	Evaluator's Rating
1	Baseline: 0 students (2009) At Least 400 full-time male and female students' access quality training at TIs in Region 3 and 5.	Not achieved 191 students enrolled by September 2012. The two TIs were only opened for classes on January 23, 2012, and February 27, 2012 respectively. 2016/2017: 433 2017/2018: 490	MUS
2	Baseline: 0 95% student graduation rate for students in regions 3 and 5 TIs by 2012.	Not achieved Target not met because construction of TIs not completed. 2017: 56.8% of students enrolled between 2012 and 2016 have graduated (934 out of 1643 students).	MUS
Overall Rating			MUS

Efficiency

4.05 The PCR assesses the cost efficiency of the project as **Satisfactory**. It refers to the Economic Rate Return (ERR) estimation of the project benefits. The model estimates the benefit of implementing fully operational TVET institutes across two Regions “3 and 5” across Guyana regarding youth unemployment and the associated economic savings. To enable this assessment, an estimate was made of the rate of graduates and the unemployed rate of youth without the project. According to the PCR, some items were more costly than envisaged at appraisal, but prudent management led to savings on other items. It was stated that the implementation of fully operational TVET institutes across Regions 3 and 5 concerning to the potential for a reduction in youth employment, the PCR states that the benefits far outweighed the costs, even though delays affected the delivery of outputs. The ERR was estimated at 21%, which is well above the CDB cut-off rate of 12%.

4.06 The PCR indicates there was no additional loan and the total sum of money disbursed for project completion was 7.292 mn, which was slightly less than the approved loan at 7.5 mn. Which indicates the money was spent within the project cost budget.

4.07 Overall, project implementation at appraisal was to begin on April 27, 2009, however due to delays in disbursement and issues relating to the implementation agency, the project suffered a later start date, these delays were approximately one year and two months, the project therefore began on June 30, 2010. At appraisal the project was estimated to be completed on July 31, 2011, however it finished on June 30, 2015, which was approximately 47 months after the original expected completion date. Delays during implementation are attributed to the geotechnical evaluation, which was not undertaken before completing the designs for Region 5; because of that, the sub-structure was unsuitable for the soil type at the location. This resulted in a modification to the sub-structure design, which caused considerable delay. Another cause of delay was tensions between CTVET and the PMU, which was then resolved thanks to the

support of the CDB team. Lastly, teacher training did not commence as initially planned due to a problem with the matriculation system.

4.08 By referring to the quantitative assessment (ERR) as suggested by the PAS Manual 2013, the Evaluator rates this criterion as **Satisfactory**.

Sustainability

4.09 The PCR rates sustainability of the project as Satisfactory. It states that GOGY has demonstrated a commitment for TVET by increasing budgetary support and enacting legislation to establish the Council for TVET.

4.10 The (BD125/08) indicates that sustaining project objectives beyond the implementation period depended on the performance of key institutions such as the Council for TVET and the GTI Teacher Training Unit. These institutions benefited from significant TA under the project. However, facility maintenance has been a critical issue in Guyana. This risk was reduced by the development of maintenance plans within the overall Operational Plans of Tis, which helped to imbue a culture of maintenance within these institutions. It was also expected that students would undertake some annual plant maintenance as an element of course work.

4.11 Based on the previous, the Evaluator rates Sustainability as **Satisfactory**, which concurs with the PCR rating.

Borrower Performance

4.12 The PCR rates the performance of the Borrower/Implementation Agency as **Marginally Unsatisfactory**; although officers in the PMU were not trained in TVET they executed their tasks satisfactorily. Implementation of the pedagogical activities was led by CTVET, which is responsible for TVET in Guyana and reports directly to the Minister. This arrangement sometimes caused issues since CTVET leadership was very experienced in the field and sometimes seemed to have difficulty taking instructions from PMU personnel. This led to delays. In addition, before the establishment of the PMU, the MOE officer supervising the preparatory activities, approved the waiving of geotechnical investigations. The result was that the foundation proposed for one of the sites was unsuitable for the location. This was discovered by the contracted contractor, who then reported it to PMU. The design had to be modified leading to more time delays and increased costs. The PMU was closed, and all staff terminated as soon as all the physical work was completed.

4.13 However, MOE effectively executed the two remaining activities. The two main officers from PMU -Project Coordinator and Finance Officer - provided voluntary assistance to MOE to facilitate the process.

4.14 The Evaluator rates the Borrower's performance as **Marginally Unsatisfactory** due to its failure to fully meet and comply with most of the PAS Manual 2013 criteria, especially regarding effective coordination and cooperation of implementing agencies in the engagement with stakeholders and boundary partners as well as gaps in compliance with terms and conditions and procurement guidelines. This is raised in the PCR multiple times as it led to some of the delays in the completion of the project.

CDB Performance

4.15 The PCR provides a self-assessment rating of CDB's performance as Satisfactory. The justification for the rating is that the extra presence of supervision led to a greater level of support to

MOE which generated more output. CDB managed the relationships between the Council for TVET and PMU in the cases where CTVE was reluctant to act on instructions from PMU. These interventions helped to mitigate delays and it was stated in the PCR that the stakeholders were pleased with the guidance and outputs of CDB. In light of the previous, the Evaluator concurs with the Satisfactory rating.

5. OVERALL PERFORMANCE

5.01 The PCR rates the overall performance of the project as **Satisfactory**. The Evaluator rates the overall project performance as **Satisfactory**. This rating is based on an arithmetic average of the total scores from separate assessments of the four core criteria: Relevance (Highly Satisfactory); Effectiveness (Marginally Unsatisfactory); Efficiency (Satisfactory); and Sustainability (Satisfactory).

5.02 Details of the ratings and justification for differences between the PCR and Evaluator are in table 4 below.

TABLE 4: SUMMARY RATINGS:

Criteria	PCR⁵	OIE Review	Reason, if any, for Disagreement/Comments
Relevance	Highly Satisfactory	Highly Satisfactory	
Effectiveness	Satisfactory	Marginally Unsatisfactory	Failure to meet completion date which led to multiple outcomes not being achieved.
Efficiency	Satisfactory	Satisfactory	
Sustainability	Satisfactory	Satisfactory	
Composite (Aggregate) Performance Rating			
Borrower Performance	Marginally Unsatisfactory	Marginally Unsatisfactory	
CDB Performance	Satisfactory	Satisfactory	
Quality of PCR	NA	Satisfactory	

6. **Lessons**

6.01 The PCR identified five lessons learnt from the implementation of the project, these lessons are as follows:

- (a) Student enrolment rate threshold should be considered as an outcome: there must be an accompanying public education programme to build awareness. When surveyed, many persons indicated they were not aware of the new institutions and, therefore, they had not applied.
- (b) Public communication programmes are necessary to further encourage enrolment in non-traditional areas. Many parents surveyed had negative views of their children's participation in non-traditional areas. A number had also visited the new TIs seeking information about traditional areas of study for their daughters.

⁵ PPES scores and ratings used in PCR and PSRs to be converted to PAS 2013 scores and ratings, using the equivalence matrix in the relevant PAS 2013 Manual (Public Sector Investment Lending and TA; PBL; CSP).

- (c) Inclusion of childcare facilities may encourage greater enrolment of young females who are parents. They would be able to have their children taken care of while attending classes. As a value-added, a childcare programme could be offered as one of the courses in the institution.
- (d) Providing appropriate technical support to project implementation is crucial. During project preparation, CDB secured expert services in TVET to guide the provision of the quality enhancement component of the project. The project also provided technical assistance support to implement several key activities.
- (e) Enhance the impact of the intervention by ensuring gender mainstreaming. At the time of the Project Appraisal, CDB was in the early stages of anchoring gender equality in Projects. This is mirrored in the project design. The project did not consider differences between male and female students in the education system and did not plan to collect disaggregated gender data for monitoring and evaluation purposes. Therefore, to enhance and monitor development effectiveness, it is critical to consider gender throughout the entire project cycle.

7. COMMENTS ON PCR QUALITY

7.01 The Evaluator rates the PCR quality as Satisfactory. The PCR provides valuable information on project design and implementation, and several important lessons learned from the project are also identified.

8. DATA SOURCES FOR VALIDATION

8.01 The primary sources for this validation exercise were CDB's First Appraisal Report (BD125/08); CDB's PCR; 2009-2016 Project Supervision Reports; and CDB's Registry files regarding the project.

9. RECOMMENDATIONS FOR OIE FOLLOW-UP

9.01 No follow-up for OIE is required.

PUBLIC DISCLOSURE AUTHORISED

APPENDIX 1

CARIBBEAN DEVELOPMENT BANK



PROJECT COMPLETION VALIDATION REPORT

**ENHANCEMENT OF TECHNICAL AND VOCATIONAL EDUCATION AND TRAINING –
GUYANA**

JANUARY 2023

APPENDIX 1

MANAGEMENT RESPONSE

The Project Completion Report (PCR) team in Social Sector Division agrees with the assessment and findings of the Project Completion Validation Report submitted by Office of Independent Evaluation (OIE). Both the PCR team and OIE agree that there were some valuable lessons learnt from the implementation of the project that would assist the Bank in designing and supporting the implementation of education projects to maximise its development effectiveness in its BMCs.

