



The World Bank

Guyana Secondary Education Improvement (P147924)

REPORT NO.: RES28828

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RESTRUCTURING PAPER
ON A
PROPOSED PROJECT RESTRUCTURING
OF
GUYANA SECONDARY EDUCATION IMPROVEMENT
APPROVED ON JUNE 4, 2014
TO
COOPERATIVE REPUBLIC OF GUYANA

EDUCATION

LATIN AMERICA AND CARIBBEAN

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ABBREVIATIONS AND ACRONYMS

EMIS	Education Management Information System
GSS	General Secondary Schools
MISU	Management Information System Unit
MOE	Ministry of Education
MTG	Mathematics Technical Group
PDO	Project Development Objective
PIU	Project Implementation Unit
SDR	Special Drawing Rights
TVET	Technical and Vocational Education and Training
VCQ	Caribbean Vocational Qualification



BASIC DATA

Product Information

Project ID P147924	Financing Instrument Investment Project Financing
Original EA Category Partial Assessment (B)	Current EA Category Partial Assessment (B)
Approval Date 04-Jun-2014	Current Closing Date 31-Mar-2020

Organizations

Borrower Cooperative Republic of Guyana	Responsible Agency Ministry of Education
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Project Development Objective (PDO)

Original PDO

The objective of the Project is to: (i) strengthen the capacity of secondary school mathematics teachers nationwide, and (ii) increase enrollment in General Secondary Schools in targeted regions.

Summary Status of Financing

Ln/Cr/Tf	Approval	Signing	Effectiveness	Closing	Net Commitment	Disbursed	Undisbursed
IDA-54730	04-Jun-2014	10-Oct-2014	25-Nov-2014	31-Mar-2020	10.00	2.97	6.41

Policy Waiver(s)

Does this restructuring trigger the need for any policy waiver(s)?

No

I. PROJECT STATUS AND RATIONALE FOR RESTRUCTURING



PROJECT STATUS

1. The Project was approved by the Board on June 4, 2014 and became effective on November 25, 2014. The objective of the Project is to: (i) strengthen the capacity of secondary school mathematics teachers nationwide, and (ii) increase enrollment in General Secondary Schools (GSS) in targeted regions.
2. The Project has three components:
 - Component 1: Strengthen the Capacity of Secondary School Mathematics Teachers Nationwide (US\$1.80M)
 - Component 2: Expansion of General Secondary School Facilities (US\$7.15M)
 - Component 3: Strengthen Institutional Capacity and Project Management (US\$1.05M)

Under Subcomponent 1.1. Capacity building for secondary school mathematics teachers has made progress, with US\$170,000 (13% of funds) disbursed. Teacher training and classroom observations have been conducted; with 300 mathematics teachers trained to date (end target: 600). A website/community of practice for mathematics teachers was established through WhatsApp (a free online messaging service) for teachers to share experiences and exchange lesson plans. Establishment of a website is currently underway which will provide a platform for resources and information by the Mathematics Technical Group (MTG) in the Ministry of Education (MOE), as well as a collaborative space for teachers to share experiences and ask/answer questions. In addition, 250 Mathematics Teaching Kits will be distributed to Secondary Schools in 2018 (end target: 250).

Under Subcomponent 1.2. The teacher appraisal instrument has been developed, meeting the target. Three workshops were conducted to provide training for school principals, teachers, heads of departments at the MOE, and Regional and District Education Officers on how to utilize the instrument to evaluate teacher performance. The MOE will include the appraisal instrument in the national policy and will assume technical and financial responsibility for administering it nationally. Establishment of mathematics standards for secondary school teachers is also underway. The purpose of these standards is to diagnose individual teachers' performance more objectively. The mathematics technical group under the MOE is working closely with a consultant on this task.

Under Subcomponent 1.3. Eight schools are participating in a technology-assisted mathematics pilot, including the use of Khan Academy mathematics software through tablets provided by the Project. Approximately 100 teachers from the 8 pilot schools have been trained on how to incorporate the use of technology into their instruction. By connecting to a mini-server, students can download and have offline access to the mathematics contents in Khan Academy Lite Software developed by the teachers. A consultant completed visits to the 8 schools involved in the pilot, and provided a report of findings that showed mixed experience among the 8 pilot schools, with some reporting success and others presenting more challenges. To help schools address these challenges, training materials and modules were developed and a rollout training is planned for April 2018.

Under Component 2. The Government requested a reduction in the number of GSS to be constructed from three schools (2,600 seats) to two (1,800 seats) (see section below for rationale). Additionally, there were significant delays (see details under Rational for Restructuring Section) in the design development of the GSS. Following a review of the revised Construction Drawings submitted on February 9, 2018, the Government deemed the drawings structurally sound and fit for construction, and decided to advertise, with minor adjustments to be made during the construction phase by the design firm. The design firm was informed of these responsibilities through a formal letter and the bidding process for construction was launched on March 19, 2018. The Project Implementation Unit (PIU) is ready to provide timely responses to any requests for clarification to ensure a smooth process. Tentative estimates suggest that construction could begin by



August 2018. The PIU will update the master schedule for school construction regularly for monitoring purposes and will create a risk management plan, listing potential weaknesses, quantifying their impact and probability, and establishing mitigation and contingency measures.

Under Subcomponent 2.2, it will provide classroom furniture and laboratory equipment for the new GSS. Despite significant delays, the criteria and technical specifications for furniture and equipment for the new schools are almost completed, with estimated costs are slightly lower than those estimated at project appraisal (March 2014) . Procurement processes for furniture and equipment are expected to start once the construction begins in order to align the delivery of goods with the availability of classrooms to avoid any issues of storage.

Under Subcomponent 3.1, an education management information system (EMIS) has been implemented for School Heads, Regional Education Officers, District Education Officers, and MOE policymakers to more efficiently manage education sector data and effectively use data to address key sector issues. All 110 GSS received two tablets to upload and access EMIS data. The application was developed by a consultant and the Management Information System Unit (MISU) within the MOE, and subsequent installation and trainings on how to use tablets and perform data entry were conducted. Data from all 20 pilot schools (which represent 16.7% of the GSS) has now been collected; with 17 out of 20 school using the live online application successfully and the remaining three to be online by July 2018. A national policy directive making use of the system mandatory for schools will be critical in ensuring its roll out, and the PIU and MOE are currently devising a strategy to this end. To change the culture of record keeping and entering student data into the system electronically, an information campaign and continuous training are needed. This subcomponent is within the planned schedule and all GSS are expected to start using the EMIS in September 2018, in order to achieve the target of full functioning of the system by the end of 2019.

RATIONALE FOR RESTRUCTURING

From the onset of its effectiveness the project was faced with a combination of several challenges which led to important delays and a project rating of moderately unsatisfactory (MU) in development objective (DO) and implementation performance (IP). The PIU was faced with important capacity issues combined with an unforeseen shift in the Government housing policy due to changes in local demographics, which led to the cancellation of construction for one of three schools. Within that context the Government of Guyana had to reassess the situation, which delayed project implementation. In parallel, the country experienced inflation in cost of construction and a depreciation of the Special Drawing Rights (SDR) exchange rate vis a vis the US\$. As the government re-assessed the school construction component, they upgraded the schools design and specification to reflect changing international standards.

In June 2017, the MOE requested for reducing construction of GSS from three to two. Following are detailed explanations:

- i. Shift in the Government's housing policy. The anticipated housing development in Silica Valley, where one of the three projected schools was to be built, will no longer be constructed and the estimated surge of student inflow will therefore not exist. As a result, the current school capacity is adequate to handle the inflow without the new development. Based on student enrollment data, the primary top (secondary grades 7, 8 and 9) student enrollment in the area was approximately 500 in 2013, whereas it dropped to 170 in 2017. As such, construction of a new GSS at this location is no longer a priority.
- ii. Cost inflation of construction. The cost of construction in Guyana has increased significantly over the 2012-2017 period. The estimated annual inflation rate of the construction industry is compound at 6.5%, which results in a 20.8% increase in construction costs over the period 2014-2017, compared to estimates at project appraisal stage. The nation's average inflation rate over all sectors for the period 1995–2017 is 4.92% (It is also useful to note that



the initial estimates for construction were prepared in 2013 and, at the time of the project appraisal, the program planned to award contracts for construction by January 2015.

- iii. Variation from the Design Proposed at Appraisal. The consultation process within the MOE to establish a new Design Brief experienced difficulties in constraining the many suggestions made in order to work within the available resources. This led to such a significant increase in size and cost, that the MOE decided to revert to using modified versions of the design of an existing school (circa 2007). The modifications included upgrades in functionality, specifically: three science laboratories (one more); two upgraded information technology labs (previously none); a Multipurpose Hall (previously none), adding barrier free access and incorporate improvements in lighting, ventilation, design safety, quality, fit, and finish; and upgrade the technical and vocational education (TVET) and Caribbean Vocational Qualification (VCQ) areas to meet the updated certifications standards in terms of teaching facilities. As result, the total estimated cost increased.
- iv. Depreciation of SDR versus USD. At appraisal stage in March 2014, the total project financing credit amount of SDR\$6.5 million was equivalent to US\$10 million. Due to SDR depreciation versus USD, SDR\$6.5 million is equivalent to US\$9.425 million as of February 23, 2018, which results in a reduction of USD\$575,000 for the Project.

3. The reduction in number of GSS to be constructed under Component 2 will result in changes in the end targets of:

Intermediate Results Indicator 2.1: “Number of additional student places created in General Secondary Schools in Regions 3 and 4 – Cumulative;” and

Intermediate Result Indicator 2.2: “Number of new GSS constructed and furnished – Cumulative”

The target of 92% for PDO Indicator 2 “Percent of secondary students enrolled in General Secondary Schools (GSS) increased in Regions 3 and 4” remains achievable and would not be changed by the reduction in the number of schools to be built. Although the scope of the GSS construction has been reduced from 3 schools (2,600 seats) to 2 schools (1,800 seats), the end target is still achievable, as the target was established conservatively based on the secondary school enrollment data in Regions 3 and 4 from years 2003 to 2012. An updated forecast based on the 2011-2016 Secondary Enrollment data provided by the MOE Planning Unit indicates that with construction of the two new GSS (1,800 seats), the percentage of secondary students enrolled in GSS in regions 3 and 4 is expected to reach 93% by the end of the Project.

II. DESCRIPTION OF PROPOSED CHANGES

Change in Activities:

The number of new General Secondary Schools (GSS) to be constructed will be reduced from three (3) to two (2), one in Region 3 and one in Region 4.

The Operational Manual will be updated accordingly once the Restructuring is approved.

Change in Result Framework:

Targets will be revised for Intermediate Results Indicators 2.1 and 2.2, as follows:



Intermediate Results Indicator 2.1: “Number of additional student places created in General Secondary Schools in Regions 3 and 4 – Cumulative”

Original End Target: 2,600

Revised End Target: 1,800

Intermediate Results Indicator 2.2: “Number of new GSS constructed and furnished – Cumulative”

Original End Target: 3

Revised End Target: 2

III. SUMMARY OF CHANGES

	Changed	Not Changed
Change in Results Framework	✓	
Change in Disbursement Estimates	✓	
Change in Implementing Agency		✓
Change in DDO Status		✓
Change in Project's Development Objectives		✓
Change in Components and Cost		✓
Change in Loan Closing Date(s)		✓
Cancellations Proposed		✓
Reallocation between Disbursement Categories		✓
Change in Disbursements Arrangements		✓
Change in Systematic Operations Risk-Rating Tool (SORT)		✓
Change in Safeguard Policies Triggered		✓
Change of EA category		✓
Change in Legal Covenants		✓
Change in Institutional Arrangements		✓
Change in Financial Management		✓
Change in Procurement		✓
Change in Implementation Schedule		✓
Other Change(s)		✓



Change in Economic and Financial Analysis		✓
Change in Technical Analysis		✓
Change in Social Analysis		✓
Change in Environmental Analysis		✓

IV. DETAILED CHANGE(S)

RESULTS FRAMEWORK

Project Development Objective Indicators

1. Percent of secondary school mathematics teachers that pass the examinations of the targeted training courses designed under the Project Unit of Measure: Percentage Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	60.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

2. Percent of secondary students enrolled in General Secondary Schools (GSS) increased in Regions 3 and 4 Unit of Measure: Number Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	87.00	88.00	92.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Intermediate Indicators

Subcomponent 1.1.a: Number of teachers that complete at least one training course designed under the Project Unit of Measure: Number				
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Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	0.00	300.00	600.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 1.1.b: Number of secondary mathematics teachers observed in the classroom and receiving expert feedback at least once during the Project's lifetime - Cumulative
 Unit of Measure: Number
 Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	0.00	153.00	600.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 1.1.c: Number of secondary mathematics teachers who have registered in the Guyanese mathematics teacher website/ community of practice - Cumulative
 Unit of Measure: Number
 Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	0.00	280.00	600.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 1.1.d: Number of secondary schools having received Mathematics Teaching Kits (includes SDs) - Cumulative
 Unit of Measure: Number
 Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	250.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 1.2.a: Mathematics standards for secondary school teachers developed
 Unit of Measure: Text
 Indicator Type: Custom



	Baseline	Actual (Current)	End Target	Action
Value	No	Yes	Yes	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 1.2.b: Revised Appraisal of secondary school teachers and principals

Unit of Measure: Text

Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	No	Yes	Yes	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 1.3: Number of secondary school mathematics teachers trained in using technology in the 8 pilot schools - Cumulative

Unit of Measure: Number

Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	0.00	100.00	24.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 2.1: Number of additional student places created in general secondary schools in Regions 3 and 4 - Cumulative

Unit of Measure: Number

Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	1800.00	Revised
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Subcomponent 2.2: Number of new GSS constructed and furnished- Cumulative

Unit of Measure: Number

Indicator Type: Custom

	Baseline	Actual (Current)	End Target	Action
Value	0.00	0.00	2.00	Revised



Date	31-Mar-2014	15-Sep-2017	31-Mar-2020
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Direct project beneficiaries				
Unit of Measure: Number				
Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	1984.00	2600.00	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	

Female beneficiaries				
Unit of Measure: Percentage				
Indicator Type: Custom Supplement				
	Baseline	Actual (Current)	End Target	Action
Value	0.00	50.00	50.00	No Change

Subcomponent 3.1: Secondary EMIS designed, developed, piloted, revised and rolled out				
Unit of Measure: Text				
Indicator Type: Custom				
	Baseline	Actual (Current)	End Target	Action
Value	No	The historical data of 12 schools from regions 3, 4 and Georgetown have been captured electronically by the server. The data entry for the remaining 8 pilot schools will be completed by August 11, 2017.	EMIS scaled up to at least 100 secondary schools with tele-connectivity (wireless or fixed); EMIS used to provide in time analysis for policy makers and produce MOE Statistical Digest for 2019	No Change
Date	31-Mar-2014	15-Sep-2017	31-Mar-2020	



DISBURSEMENT ESTIMATES

Change in Disbursement Estimates

Yes

Year	Current	Proposed
2014	0	0
2015	618066.08	1188421.00
2016	1545165.20	494720.00
2017	1854198.24	85421.00
2018	1854198.24	1200305.00
2019	2472264.28	4031133.00
2020	1699681.70	3000000.00