

**INTEGRATED SAFEGUARDS DATA SHEET
APPRAISAL STAGE**

Report No.: ISDSA7620

Date ISDS Prepared/Updated: 17-Mar-2014

Date ISDS Approved/Disclosed: 17-Mar-2014

I. BASIC INFORMATION

1. Basic Project Data

Country:	Guyana	Project ID:	P147924
Project Name:	Guyana Secondary Education Improvement (P147924)		
Task Team Leader:	Hongyu Yang		
Estimated Appraisal Date:	18-Mar-2014	Estimated Board Date:	28-May-2014
Managing Unit:	LCSHE	Lending Instrument:	Investment Project Financing
Sector(s):	Secondary education (100%)		
Theme(s):	Education for the knowledge economy (100%)		
Is this project processed under OP 8.50 (Emergency Recovery) or OP 8.00 (Rapid Response to Crises and Emergencies)?			No
Financing (In USD Million)			
Total Project Cost:	12.00	Total Bank Financing:	12.00
Financing Gap:	0.00		
Financing Source			Amount
BORROWER/RECIPIENT			0.00
International Development Association (IDA)			12.00
Total			12.00
Environmental Category:	B - Partial Assessment		
Is this a Repeater project?	No		

2. Project Development Objective(s)

The objective of the Project is to increase the number of students with access to secondary school mathematics teachers benefiting from continuous professional development nationwide and, to increase the number of students in secondary schools with improved learning conditions in targeted regions.

3. Project Description

The project would achieve its development objective through implementation of two components:

1) Number of students with access to teachers that meet 3 out of the following 4 conditions:

- i) 80 hours of in-service training per year (starting year 2 of the Project).
- ii) 90% of attendance to the monthly peer-based teacher professional development workshops per school year.
- iii) Receiving school-based supervision by mathematics instructional specialists at GSSs and SDs, 3 times per academic year.
- iv) Using the on-line “Community of Practice”

2) Number of students enrolled in secondary schools that meet 3 out of the following 4 conditions in regions 3 and 4:

- i) Offering a full secondary schools curriculum (from grades 7 to 11)
- ii) Equipped laboratory
- iii) Classrooms with separating walls
- iv) Class sizes with no more than 40 students

A. Project Components

Component 1: Continuous Professional Development for Secondary School Math Teachers (US\$ 1.9 million): The objective of this component is to improve content knowledge and pedagogy of secondary school Mathematics teachers to improve teachers’ practices in the classroom (with the ultimate goal of improving students learning). The expected outcome is improved Mathematics instruction as measured by a classroom observation tool. Three sub-components are proposed:

- a) Sub-component 1.1 - In-Service Teacher Training and Upgrading in Mathematics (US\$1.3 million). This would include: (i) a diagnostic assessment of mathematics teachers to determine content knowledge, reveal current instructional practices and identify training needs; (ii) professional development and enhanced capacity of master trainers from NCERD, CPCE and UG to deliver in-service training to all secondary school Mathematics teachers; (iii) design, development and provision of modular, iterative, competency-based training for all secondary mathematics teachers; and (iv) distribution of mathematics teaching aids to all secondary schools, to promote the application of training in the classroom and improved student learning. This training would be closely followed up by regular supervision visits by mathematics instructional specialists (3 times per year per school), who would observe teachers’ practice and provide immediate feedback. The project would finance technical assistance, materials, training activities, supervision logistics and procurement/distribution of teaching aids.

In addition, at the regional level, Mathematics Subject Committee Meetings would continue to be held for all Mathematics Department Heads. Subject Committee Meetings would be carefully planned, structured and offered each month to address specific learning objectives and to share experiences, facilitated by mathematics instructional specialists and coordinated by Regional and District Education Officers. At the school level, Department Heads for Mathematics would organize monthly meetings for all math teachers, to share lesson plans, teaching methods, knowledge and skills from regional Subject Committee Meetings, and to prepare new lessons and learning activities together. The Project will also provide information through initial training sessions to ensure the buy-in and support of all School Heads and to emphasize their responsibility as school leaders and agents of change for the whole school. The project would finance procurement of laptops and LCD projectors to support these meetings. Meanwhile, the GoG has committed to provide sufficient

funding each year in the MOE's budget to provide required logical support (supplies, transportation, snacks, etc.).

Finally, the project would support establishment of an on-line "community of practice" among all mathematics teachers, via a comprehensive website which would enable teachers to inter alia access on-line instructional resources, share lesson plans, pose questions to fellow teachers and mathematics experts, post blogs, review CSEC mathematics study guides, and locate email addresses of fellow mathematics teachers.

Provision of continuous professional development at central, regional and school levels, and on-line, would be mutually reinforcing. This four-year in-service training program would complement other pre-service training activities supported through the IDA-financed "Improving Teacher Education Project".

b) Sub-component 1.2 – Revision of the Appraisal Instruments for Secondary School Teachers. (US \$300,000). This sub-component aims to improve mathematic teaching through the following three activities: (i) the development of specific standards for Mathematics instruction, based on the general teaching standards that are being produced by the MOE; (ii) the revision and piloting of the appraisal instruments for secondary school teachers and school Principals, based on the current Report on Annual Appraisal on Teachers in Guyana and the teachers' diagnostic under subcomponent 1.1.; and (iii) training for secondary school Principals and Deputy Principals in the use of the revised teacher appraisal instruments.

c) Sub-component 1.3 - Technology-assisted Learning in Mathematics (US\$300,000): This would include support to: (i) pilot the use of technology (both hardware and software) to improve mathematics instruction and learning in about 8 secondary schools over three years, promoting innovation and providing lessons for possible future scaling up; and (ii) carry out an independent process evaluation to assess the effectiveness of different packages of hardware and software in improving student learning outcomes in mathematics. Alternative technologies would be piloted, including portable tablets with the capability to download and operate a range of mathematics software applications, as well as more standard visual display devices (LCD projectors). Teachers would post regular "reflection blogs" regarding their experiences and questions to a website set up for this purpose. To establish a baseline, school-level results for the 2013 Grade 9 mathematics achievement exam would be used (covering both intervention and control schools). The same test would be administered in both intervention and control schools after 4 years, so that the respective learning gains over this time period could be assessed (difference in differences approach). In addition, a more qualitative, process-focused evaluation would be conducted to gather teacher and student feedback, assess technology adoption, review on-line resources prepared by participating teachers, and compare outcomes from different technology packages. The project would finance technical assistance, procurement of hardware and software, training and evaluation activities.

Component 2: Expansion of Secondary School Facilities (US\$ 9.0 million): The objective of this component is to expand access to general secondary school services in underserved areas of Regions 3 and 4. New school construction would include classrooms, laboratories, outdoor areas and specialist rooms required under the secondary education curriculum. This would enable approximately 1,800 students to be re-assigned from low-quality SDs and over-crowded GSSs to new high-quality GSSs, and create an additional 1,800 student places at the secondary level. It would have 2 sub-components.

a) Sub-component 2.1 - New School Construction (US\$8 million): The project would finance construction (civil works) of four new GSS in Regions 3 and 4. Two new GSSs would be for 1,000 students each, while the two other GSS would be for 800 students each (for a total of 3,600 new GSS student places). This would consolidate an estimated 10 SDs into complete secondary schools offering Grades 7-11, reduce severe overcrowding at 2 existing GSS, and prepare for increasing student populations coming from the primary level to all GSS in these regions. Two of the new GSSs would be located in new housing areas where hundreds of new homes are in the process of being built and no schools exist. The basic design and architectural plans already exist from recently constructed GSSs financed through domestic resources; although they need to be revised, this should accelerate bidding and implementation of the civil works.

b) Sub-component 2.2 – New School Furnishing and Equipment (US\$1 million): This would finance procurement of classroom furniture, laboratory equipment and basic technology for the four new GSSs, to ensure that the new schools provide the necessary learning conditions to offer the full secondary education curriculum.

Component 3: Institutional Capacity Building and Project Management (US\$ 1.1 million): The objective of this component is to strengthen capacity of: (i) the Education Management Information System (EMIS); and (ii) MOE Project management. It would have 2 sub-components.

a) Sub-component 3.1 - Strengthening of EMIS Capacity (US\$200,000): This would include design, development and implementation of a new EMIS, which would enable school heads and MOE policymakers to more efficiently manage education sector data and use information for more effective planning and policymaking. The project would finance procurement of EMIS software and hardware, tablets (one or two) for each GSS, technical assistance and training. Worth noting is that this EMIS would capitalize on the GoG's "e-government initiative", which has set up a large national data center (now operational) and is establishing 4G wireless connectivity covering approximately 80 percent of the population (expected to be operational in August 2014). The vast majority of secondary schools are located within this high-speed wireless area, so they will have free connectivity, easy uploading and access to education information with their tablets, and free hosting of the EMIS software and database.

b) Sub-component 3.2 - Project Management and Monitoring (US\$900,000): This would support implementation of project activities with technical assistance, limited equipment and supplies and certain operational costs, as well as financing of annual independent audits and monitoring of the Project objectives and outcomes.

4. Project location and salient physical characteristics relevant to the safeguard analysis (if known)

The plans are to create four secondary schools distributed within Region 4 (three schools), Region 3 (one school). Region 3 (Essequibo Islands – West Demerara) and Region 4 (Demerara – Mahaica) are both located in coastal urban areas, near the capitol city of Georgetown. These regions are on the east side of the Essequibo River surrounding the capitol on the low-lying fertile coastal plain along which most of the population is concentrated.

While the projects will focus on meeting needs in these urban coastal areas, the final number and specific locations (within Regions 3 and 4) of schools will depend on feasibility studies, analysis of recent government-financed secondary schools, and other investment priorities. Proposed project activities and locations will therefore be verified in appraisal mission.

Component 1 of the Project, Improved Mathematics Instruction, will be implemented in Hinterland Regions 1, 7, 8, 9, home to the country's indigenous, Amerindian populations. The objective of the project in these Regions is to train secondary school teachers and improve teaching in mathematics for about 12 general secondary schools (GSS) and 100 secondary departments in primary schools (SD) – grade 7 and 8. Approximately 148 mathematic teachers will be trained in the 4 Hinterland regions. No school construction or rehabilitation is planned in the Hinterland.

5. Environmental and Social Safeguards Specialists

M. Yaa Pokua Afriyie Oppong (LCSSO)

Michael J. Darr (LCSSEN)

6. Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/ BP 4.01	Yes	<p>The Project is Category B in terms of potential environmental impacts, and OP4.01 is triggered. The main environmental impacts expected of the Project are localized, low and possible to mitigate or prevent, and these will be related to the construction and rehabilitation works planned under Component 2. Construction activities will create minor impacts such as dust, noise, storage and disposal of debris, traffic and utilities disruption, and safety of workers and road users. A simplified Environmental Assessment and Management Plan (EAMP) has been prepared and disclosed that is commensurate with the level of design (e.g. pre-feasibility, feasibility, etc.). The EAMP includes: i) a description of the project (e.g. location, size and features of the new school); ii) a simple description of the existing environmental and social baseline conditions of the project site, affected areas and communities; iii) an assessment of the potential environmental and social effects likely to occur (e.g. increased noise levels and traffic disruption during construction, safety issues, waste management during construction and school operations among other issues); iv) generic mitigation measures applicable during the design and construction phases (e.g. waste water and sanitation services, generic health and safety measures, etc.), which will be similar for each of the 4 new schools; v) specific environmental and social measures for each site to address any site-specific problems; and, vi) legal and institutional provisions (e.g. the environmental permits to be acquired, governmental agencies involved during constructions and operations, etc.). The EAMP also includes mitigation measures applicable</p>

		<p>during operations. For example, waste management activities will be implemented because Component 2 includes provisions for laboratories and specialist rooms required under the secondary education curriculum.</p> <p>The EAMP includes a public information and communications strategy to help ease concerns from secondary students and their families, as well as to build buy-in for the Project and tolerance for any temporary inconveniences that the project may cause. The project also establishes a grievance redress mechanism that will collect complaints of the communities and provide timely response.</p>
Natural Habitats OP/BP 4.04	No	<p>This policy is not triggered since the potential impacts to natural habitats will not be significant due to the location of the works (adjacent to existing schools and in urban areas) and the small scale of project interventions. Any impacts on vegetation will be carefully screened during project preparation and through provisions in the EAMP to ensure that natural habitats are not impacted.</p>
Forests OP/BP 4.36	No	<p>This policy is not triggered because any impacts are expected to be small and will not affect management of forest resources.</p>
Pest Management OP 4.09	No	<p>Pesticide may be used in small quantities for termite treatments of foundations and ceilings, or for vector control during school operations; however, the EAMP will specify that only licensed, authorized pest control specialists may provide these services.</p>
Physical Cultural Resources OP/ BP 4.11	No	<p>This policy is not triggered since there are no physical cultural resources at any of the existing school sites and the size of project/site is small. Given that the construction of new school and rehabilitation works could result in small earthworks, the EAMP will specify that site screening must be performed to avoid affecting physical cultural resources; that stakeholders contribute to project conceptual design; and, that chance-find procedures must be included in contracting documents.</p>
Indigenous Peoples OP/BP 4.10	Yes	<p>The Indigenous Peoples Policy is triggered since the project's intended intervention areas include those inhabited by indigenous groups in the</p>

		Hinterland. An Indigenous Peoples Plan (IPP) has been prepared with associated consultations. The expected impacts of the project on indigenous communities are both positive and discrete; the main impact is expected to be improved learning of mathematics among indigenous youth, which should increase their secondary level completion rates and opportunities to continue on to higher education and/or succeed in the labor market. There is no school construction or rehabilitation planned in indigenous areas.
Involuntary Resettlement OP/BP 4.12	No	This policy is not triggered. No private land acquisition will occur under the project. All schools will be constructed on existing Government land and the Government will provide proof of land ownership and transfer of title (to the MOE) to the Bank prior to project appraisal. A cut-off date will be established after which no claims on the lands (crops, squatters etc.) will be recognized.
Safety of Dams OP/BP 4.37	No	This policy is not triggered because the Project will not finance the construction of new dams nor will support other investments that rely on services of existing dams.
Projects on International Waterways OP/BP 7.50	No	The policy is not triggered since the Project will not affect any international waterways as defined under the policy.
Projects in Disputed Areas OP/BP 7.60	No	Schools to be constructed are not in disputed areas as defined under the policy.

II. Key Safeguard Policy Issues and Their Management

A. Summary of Key Safeguard Issues

<p>1. Describe any safeguard issues and impacts associated with the proposed project. Identify and describe any potential large scale, significant and/or irreversible impacts:</p> <p>The potential negative effects of the project are related to construction activities, which are minor and manageable with standard techniques as described in the EAMP; there are no long-term negative impacts associated with the project.</p> <p>Indigenous Peoples OP/BP 4.10 - Component 1, Improved Mathematics Instruction, will be implemented in Hinterland Regions 1, 7, 8, and 9, home to the country's indigenous, Amerindian populations. Approximately 148 mathematic teachers will be trained in the 4 Hinterland regions. The project is expected to improve mathematics teaching secondary schools. No school construction or rehabilitation is planned in the Hinterland.</p>
<p>2. Describe any potential indirect and/or long term impacts due to anticipated future activities in the project area:</p> <p>None.</p>

3. Describe any project alternatives (if relevant) considered to help avoid or minimize adverse impacts.
Alternatives for possible school sites were reviewed in the field in a pre-appraisal mission. No major issues were observed with the selected sites.
4. Describe measures taken by the borrower to address safeguard policy issues. Provide an assessment of borrower capacity to plan and implement the measures described.
<p>The Ministry of Education (MoE) issued the EAMP and will be the implementing agency responsible for the Project. Coordination, technical and fiduciary aspects of the Project would be overseen by a Project Coordinator (PC), to be located in the MoE Planning Department, Buildings Unit, who would report to the Permanent Secretary of the MoE.</p> <p>Indigenous Peoples OP/BP 4.10. The Borrower has consulted with Amerindian beneficiaries in Regions 1, 7, 8, 9 and will finalize and will disclose an Indigenous Peoples Plan prior to Appraisal. The Borrower (and specifically the MOE) has experience with OP/BP 4.10 in the context of the University of Guyana Science and Technology Project.</p>
5. Identify the key stakeholders and describe the mechanisms for consultation and disclosure on safeguard policies, with an emphasis on potentially affected people.
<p>The EAMP was disclosed and included a web-based grievance redress mechanism.</p> <p>The primary stakeholders of the project, in both Coastal and Hinterland Regions, are secondary school mathematics teachers, their students and their families as well as the Ministry of Education. In addition, the following stakeholders will also likely benefit, particularly in the Hinterland the: Regional Education Officers; District Education Officers.</p> <p>Indigenous Peoples Plan OP/BP 4.10. Teachers, pupils and their families in the Hinterland were consulted during the preparation of the Indigenous Peoples Plan. The draft disclosed plan will in turn be consulted for final comment and the stakeholders will be engaged during the implementation of the project.</p>

B. Disclosure Requirements

Environmental Assessment/Audit/Management Plan/Other	
Date of receipt by the Bank	07-Mar-2014
Date of submission to InfoShop	12-Mar-2014
For category A projects, date of distributing the Executive Summary of the EA to the Executive Directors	
"In country" Disclosure	
<i>Comments:</i>	
Indigenous Peoples Development Plan/Framework	
Date of receipt by the Bank	13-Mar-2014
Date of submission to InfoShop	17-Mar-2014

"In country" Disclosure	
Guyana	18-Mar-2014
<p><i>Comments:</i> IPP is expected to be disclosed between today and tomorrow March 18. Today, March 17 is a Country holiday. Location: Ministry of Education, Guyana: http://www.education.gov.gy/web/index.php/project</p>	
<p>If the project triggers the Pest Management and/or Physical Cultural Resources policies, the respective issues are to be addressed and disclosed as part of the Environmental Assessment/Audit/or EMP.</p>	
<p>If in-country disclosure of any of the above documents is not expected, please explain why:</p>	

C. Compliance Monitoring Indicators at the Corporate Level

OP/BP/GP 4.01 - Environment Assessment	
Does the project require a stand-alone EA (including EMP) report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional Environment Unit or Sector Manager (SM) review and approve the EA report?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Are the cost and the accountabilities for the EMP incorporated in the credit/loan?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
OP/BP 4.10 - Indigenous Peoples	
Has a separate Indigenous Peoples Plan/Planning Framework (as appropriate) been prepared in consultation with affected Indigenous Peoples?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If yes, then did the Regional unit responsible for safeguards or Sector Manager review the plan?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
If the whole project is designed to benefit IP, has the design been reviewed and approved by the Regional Social Development Unit or Sector Manager?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input checked="" type="checkbox"/>]
The World Bank Policy on Disclosure of Information	
Have relevant safeguard policies documents been sent to the World Bank's Infoshop?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have relevant documents been disclosed in-country in a public place in a form and language that are understandable and accessible to project-affected groups and local NGOs?	Yes [<input type="checkbox"/>] No [<input checked="" type="checkbox"/>] NA [<input type="checkbox"/>]
All Safeguard Policies	
Have satisfactory calendar, budget and clear institutional responsibilities been prepared for the implementation of measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Have costs related to safeguard policy measures been included in the project cost?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
Does the Monitoring and Evaluation system of the project include the monitoring of safeguard impacts and measures related to safeguard policies?	Yes [<input checked="" type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]

Have satisfactory implementation arrangements been agreed with the borrower and the same been adequately reflected in the project legal documents?	Yes [<input type="checkbox"/>] No [<input type="checkbox"/>] NA [<input type="checkbox"/>]
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III. APPROVALS

Task Team Leader:	Name: Hongyu Yang	
<i>Approved By</i>		
Sector Manager:	Name: Reema Nayar (SM)	Date: 17-Mar-2014