Report Number: ICRR0022048

1. Project Data

Project ID P163608	Project Name Ethiopia Education RBF Project		
Country Ethiopia	Practice Area(Lead) Education		
L/C/TF Number(s) TF-A5268	Closing Date (Original) 30-Jun-2019		Total Project Cost (USD) 21,801,212.00
Bank Approval Date 29-Jun-2017	Closin 30-Jun-		
	IBRD/I	DA (USD)	Grants (USD)
Original Commitment	30,000,000.00		30,000,000.00
Revised Commitment	30,000,000.00		21,801,212.00
Actual	21,801,212.00		21,801,212.00

2. Project Objectives and Components

a. Objectives

According to the Grant Agreement (page 6) and the Project Appraisal Document (PAD, pages 14-15), the project objective was as follows:

- To contribute to improvement of learning conditions in primary schools in targeted regions including in pre-primary classes.
- b. Were the project objectives/key associated outcome targets revised during implementation?
 No
- c. Will a split evaluation be undertaken?
- d. Components
 - 1. Improving Learning Conditions in Primary Schools in Targeted Regions (Appraisal: US\$ 10.0 million; Actual: US\$ 8.4 million): This component aimed to test a comprehensive intervention model in the Afar region, which had one of the highest shares of low-performing primary schools in the country, according to 2016-17 school-level inspection data. The project was to support upgrades in 80 of the low-performing schools, based on their School Improvement Plans. This component was also to support development of a new early childhood education (ECE) curriculum package for pre-primary classes ("O-classes") and training of pre-primary teachers in the Benishangul-Gumuz and Gambella regions, which were selected based on strong engagement in the design and implementation of ECE services.
 - 2. Strengthening Equity and Inclusion in Education (Appraisal: US\$ 10.0 million; Actual: US\$ 8.4 million): This component aimed to increase equity with regards to gender and to children with special needs. For the former, this entailed increasing the number of female school principals, as a means of demonstrating an equitable education profession and gender inclusive system. Activities included prioritization of women applicants for school leadership training and deployment for new openings of school principals. Regarding inclusive education, the project was to provide a financing mechanism to support special needs students through per capita school grants, for which the regions would need to report on the utilization of the grants.
 - 3. Improving Internal Efficiency of Primary Schools in SNNP Region (Appraisal: US\$ 10.0 million; Actual: US\$ 5.0 million): This component aimed to reduce the Grade 1 dropout rate in the Southern Nations, Nationalities, and Peoples Region (SNNPR), which had the highest drop out rate. Activities to improve attendance and reduce drop outs included: sensitization of communities on the importance of attendance in the early years, teacher training, provision of textbooks, and improved monitoring mechanisms.

An overarching purpose for all components was to test new approaches and learn lessons to inform the national scale-up of these activities. The project design also featured the first ever results-based financing modality in the education sector in the country, under which disbursements were linked to the achievement of pre-agreed results.

e. Comments on Project Cost, Financing, Borrower Contribution, and Dates Project cost

• The appraised project cost was US\$ 30.0 million and the actual project cost was US\$ 21.8 million. Due to the disbursement-linked approach, shortfalls in achieving agreed targets at the time of verification meant that disbursements were not released.

Financing

• The project was financed entirely by a Global Partnership for Education (GPE) grant of US\$ 30.0 million, of which US\$ 21.8 million. The remaining undisbursed amount was in the process of being cancelled at the time of ICR preparation. Financing was initially envisioned as part of the GPE-financed flagship \$100 million Education Sector Program Implementation Grant (Additional Financing to the General Education Quality Improvement Project, GEQIP-II); this project was eventually broken off as a separate project in keeping with GPE's requirement for 30% of funding to be in the form of a variable grant aimed at the achievement of stretch targets to improve education efficiency, equity, and quality.

Borrower contribution

There was no planned Borrower contribution.

Dates

The project was approved in June 2017 and closed in June 2019 as planned.

3. Relevance of Objectives

Rationale

Ethiopia is a large, geographically and ethnically diverse country which, despite significant economic growth in recent decades, remains among the poorest countries in the world. It had made significant progress in meeting the Millennium Development Goals with regards to primary school enrollment, child mortality, and access to clean water. It now strives to achieve lower middle income country status, the attainment of which will depend on accelerated human capital development.

The government's Education Sector Plan V (2016-2020) aimed to improve quality education equitably across all levels, in support of the goal to achieve middle income status. The government's share of budget allocated to education had been around 20 percent, with a recent expansion of the national school system increasing access to school for many. The focus then shifted to improving learning and completion rates, with key areas identified as curriculum development, teacher and school leader development, school improvement, system management, use of information technology, and program planning and evaluation. Quality of schools, in terms of school inputs, processes and outcomes, is variable across regions, with the Afar region having by far the highest percentage of below-standard primary schools. Quality has also been negatively impacted by the lack of training for pre-primary education service delivery and low enrollment rates for children with special needs. Efficiency of the school system, due to high level of dropouts, and readiness for school through pre-primary programs, were also key areas identified for improvement.

These focus areas were also consistent with those identified in the Bank's Country Partnership Strategy (FY18-22), which was in place at the time of appraisal and also at completion. Building resilience and inclusiveness was a key focus area, with improved basic education learning outcomes identified as a key objective and scores on proficiency tests, completion rates, dropout rates, and proportion of qualified teachers as indicators. Given the Bank's significant engagement in the education sector in recent decades, the project objectives were also appropriately challenging to accelerate improvements in these areas of education quality.

Rating

High

4. Achievement of Objectives (Efficacy)

OBJECTIVE 1

Objective

To contribute to improvement in learning conditions in primary schools in targeted areas

Rationale

The theory of change was sound, with the key activities selected in response to an assessment of the most urgent needs in the most vulnerable regions of the country. The main outputs included development of school improvement plans to upgrade learning materials and school facilities, implementation of a new ECE curriculum, recruitment and training of female school leaders, supplemental grants to schools for children with special needs, teacher training, and communications campaigns on the importance of school attendance. These outputs were likely to lead to the intended outcomes of improved learning conditions in targeted areas, including in pre-primary classes. Most of these activities were implemented as pilot interventions, in order to test new approaches prior to scaling up nationwide. A results-based approach, with

ambitious targets, was also employed to further incentivize the government on results and performance in improving efficiency, equity, and quality.

Outputs

Afar region

 Analysis of school-level inspection reports and support to 80 low-performing schools to develop School Improvement Plans (including training of school officers and local education office staff on inspections and improvement plans). Support to the 80 schools included provision of teaching and learning materials, blackboards, desks, and water tanks.

Benishangul-Gumuz and Gambella regions

• Development of O-class curriculum package (including child-friendly, play-based focus) and provision of learning materials and training in local languages to O-class teachers.

SNNPR

• Development of mechanism to monitor dropouts and activities to mitigate dropouts, including: sensitizing communities on the importance of student participation/attendance in early years of schooling, school feeding, and strengthening the links between the school improvement plans and the inspectorate system to ensure focus on improved school attendance/completion.

All regions

- Recruitment and training of female school leaders.
- Update of special needs school grant guidelines.

Outcomes

The share of low performing primary schools ("Level 1") in Afar region decreased from 46.5% in 2015/16 (179 out of 385 schools) to 31.9% (123 out of 385 schools) in 2017/18. This fell short of the target of 25.7% (70% of the target achieved). 56 primary schools had upgraded to "Level 2" schools (compliance with 50% or more of standards) and another 38 schools were close to the threshold (compliance with 45-49% of standards) and were "expected to be upgraded in the next few

years" (ICR, page 11). Taking into account these latter 38 schools that were nearly upgraded to Level 2 schools, the share of low performing schools would be 24.4%.

- In Benishangul-Gumuz, 489 O-class teachers were trained, surpassing the target of 447. In Gambella, 218 O-class teachers were trained, surpassing the target of 160. More than 90% of the O-classes in these two regions were using the newly developed curriculum.
- 2,124 females were appointed as primary school principals or vice-principals during the project period, falling short of the target of 3,060 (69% of target achieved). The total number of female school principals or vice-principals in the country reached 5,274, falling short of the target of 6,210 (85% of target achieved). The shortfall was attributed to several factors, including stipulations in the Implementation Manual that the trained females should be assigned to leadership positions either in the same or nearby schools, which was not always possible given available positions; trainees were not always willing to relocate from their homes; Ethiopia's civil service regulations required that vacancies in public sector positions be open to competition, that is by both males and females; some regions in which there had never been women school leaders were resistant to hiring female leaders due to cultural influences; and some experienced trainees preferred continuing their work as teachers. Further, the increased work hours required for school leaders did not always include a commensurate increase in salary. Findings from the qualitative analysis of the impact of female school principals on girls' experience included the following focus group discussion comments (ICR, page 14): female school leaders empower girls, support their self-confidence, and motivate them to work harder and aspire for a better future; girls more openly discuss their problems with female school leaders than with male leaders; girls' participation in extracurricular activities such as girls' clubs, remedial classes, and other school activities increases with the assignment of a female principal or deputy principal; female leaders tend to advise girls to continue their schooling and play a role in the prevention of gender-based violence and early marriage. No specific data or methodology for the focus group discussion are reported in the ICR.
- All regions submitted detailed reports on the utilization of the 4% supplemental school grants to support children with special needs. Grants were used to hire medical experts to assess hearing and visual impairment levels and provide learning materials to the students with special needs. 46% of principals responded that the program is "very effective" and 36% "somewhat effective." 70% of respondents reported that the received support made it easier for them to meet the needs of students with certain disabilities. Although regional bureaus also noted that the amount allocated was too little to sufficiently cover costs, the financing was important in raising awareness for special educational needs and helped regions implement different strategies to strengthen their inclusive education programs.
- The Grade 1 dropout rate in SNNPR decreased from 25.2% in 2014/15 to 16.6% in 2017/18. This fell short of the target of 13.0% (70% of target achieved). This shortfall was in part due to social unrest that led to the closure of schools and the displacement of people and also to a deterioration in the reliability of data because of difficulties in delivering updated data. The decline in dropout is nonetheless favorable compared to the national trend in dropout rates, which decreased at a slower rate from 21.4% in 2014/15 to 19.5% in 2017/18.

Rating Substantial

OVERALL EFFICACY

Rationale

Achievement is rated Substantial based on fully achieved outcomes in improving learning conditions in preprimary classes and for children with special needs, and mostly achieved outcomes in the reduced share of low-performing schools in Afar, number of female school leaders appointed nationwide, and reduced Grade 1 dropout rate in SNNPR.

Overall Efficacy Rating

Substantial

5. Efficiency

The economic analysis at appraisal (PAD, Annex 4) discussed the expected economic impact of the project, including the improved learning environment leading to higher skills of students and therefore higher future productivity and earnings. A cost-benefit analysis was also presented, with benefits quantified as increased earnings. The analysis covered only one of the five results areas - reduced Grade 1 drop out rate in SNNPR - for which disbursements were appraised at US\$10.0 million, or 33.3%, of the project costs. The benefits were calculated based on the number of additional students who would be retained in the education system and progress to Grade 2, and then those students who would graduate from primary or secondary education. The costs were calculated as total project cost of \$30.0 million (although project costs for this results area were for Component 3 only, or US\$10.0 million), plus costs of additional teachers hired to maintain existing student-teacher ratio, and cost of per capital school grants. The estimated benefit-to-cost ratio ranged from 2.8 - 3.4; the net present value ranged from US\$ 213.1 million - US\$ 318.6 million; the internal rate of return ranged from 13.7% - 15.7%. The analysis noted that additional non-quantifiable positive externalities would further increase benefits, such as lower crime rates, better health outcomes, higher tax receipts, and increased economic growth.

The economic analysis at completion (ICR, Annex 4) discussed the internal inefficiency of the education system due to high dropout rates and the potential economic gains through investing in education, particularly preprimary education. The cost-benefit analysis, similar to the approach taken in the PAD, only covered one of five results areas - reduced Grade 1 dropout rate in SNNPR - and estimated benefits based on the number of additional students who were retained in the education system and progressed to Grade 2, the students who graduate from primary and secondary education, and higher expected earnings. The costs are actual project costs of US\$ 21.8 million (although project costs for this results area were for Component 3 only, or US\$5.0 million), primary and secondary education public expenditures, cost of additional teachers, and per capita school

grants. However, the updated benefit-cost ratio was lower than appraised because of shortfalls in reaching disbursement-linked indicator (DLI) targets during the second year of project, due to ethnic clashes, regional instability, drought, and insufficient regional budgets for the school feeding program. According to the updated analysis, the benefit-to-cost ratio was 2.5; the net present value was US\$ 183.2 million; and the internal rate of return was 12.1%. There were no data on benefits from the remaining four results areas, although it was presumed that there would be non-quantifiable benefits due to improved learning outcomes: higher lifetime earnings and increased economic growth, as well as positive externalities from more inclusive education (girls and children with special needs).

There were some implementation inefficiencies, despite effective harmonization of donor support and project coordination. There were delays in procurement of inputs for upgrading schools in the Afar region and issues with data collection, which resulted in reporting delays and thus delayed disbursement of grants. There was also unrest in the SNNPR which led to school closings. US\$21.8 million of the grant was disbursed, while the remaining US\$ 8.2 million remained undisbursed due to shortfalls in meeting DLI conditions for upgrading schools in Afar, appointment of female school leaders, and reduction in the Grade 1 dropout rate in SNNPR.

Efficiency is rated Modest based on lower than appraised cost-benefit ratio/internal rate of return/net present value, also some implementation inefficiencies.

Efficiency Rating

Modest

a. If available, enter the Economic Rate of Return (ERR) and/or Financial Rate of Return (FRR) at appraisal and the re-estimated value at evaluation:

	Rate Available?	Point value (%)	*Coverage/Scope (%)
Appraisal	✓	13.70	100.00 □ Not Applicable
ICR Estimate	✓	12.10	100.00 □ Not Applicable

^{*} Refers to percent of total project cost for which ERR/FRR was calculated.

6. Outcome

Relevance of the project objective is rated High based on strong alignment with country conditions and Bank strategy. Efficacy is rated Substantial based on fully and mostly achieved outcomes/indicators to improve learning conditions in primary schools in targeted areas. Efficiency is rated Modest based on lower than

appraised cost-benefit ratio/internal rate of return/net present value, and also some implementation inefficiencies. These ratings indicate moderate shortcomings in the project's preparation and implementation, leading to an Outcome rating of Moderately Satisfactory.

a. Outcome Rating
 Moderately Satisfactory

7. Risk to Development Outcome

Government commitment to improving learning conditions in primary schools, particularly for hard-to-reach regions and populations, remains strong, as reflected by the priorities identified in the next Education Sector Development Plan VI and the follow-on GEQIP-E project (P163050) for US\$ 2.2 billion. Interventions supported by the sector plan and the Bank project build on those implemented by this project, including: the introduction of a Quality Enhancement and Assurance Program for the O-class program; the provision of supplementary school grants (in place of the 4% budget top-up) to transform 687 cluster center schools to inclusive education resource centers; national level school-based monitoring of student attendance; incentives for schools to improve performance on two specific internal efficiency indicators (the ratio of grade 2 enrollment to grade 1 enrollment and increase in survival rates to grade 5); targeting communications to raise awareness of issues related to grade repetition and readmission, absenteeism, and dropout; and expansion of the program for training female teachers for leadership positions. However, a significant risk remains due to ethnic conflicts and violence.

8. Assessment of Bank Performance

a. Quality-at-Entry

The project objective and theory of change were highly relevant to country conditions and the sector agenda. Quality-at-entry was strong as project preparation was based on the Bank's prior and ongoing engagement in the education sector (Education Sector Development Plans, General Education Quality Improvement Project I (P106855) and II (P129828)) and effective coordination with donors. This project, and the sister GPE operation (Additional Financing for the GEQIP-II), moved the sector agenda forward on quality issues by focusing on low quality of schools in disadvantaged areas, low quality of pre-primary programs, inequity with regards to gender and children with special needs, and high dropout rates. This project also introduced new approaches to accelerate quality improvements, including pilot testing of new interventions in disadvantaged areas; establishing the first results-based financing modality in the education sector, in which disbursements were linked to the achievement of agreed results; and setting "stretch" targets to accelerate quality improvements. The project design therefore included measures to learn from pilot interventions in a timely manner to inform the sector agenda. The ICR (page 27) noted that the ambitious "stretch" targets were required by GPE, particularly with a very short implementation period; however, the Bank made a decision to proceed with this results framework "given the associated external financing and the fact that these could be seen as incentivizing achievement of results."

Lessons learned from previous results-based operations were applied, including the need for strong M&E arrangements and precise protocols (technical aspects of the verification exercise) to determine the achievement of DLIs, agreed and endorsed up front to ensure transparency. The risk assessment identified the overall risk as "Moderate," although more substantial risks were identified as political and governance issues, technical design of the project, and fiduciary risks. Capacity building support was included to address the latter two risks. The M&E design was overall sound with a clear results chain and monitoring arrangements and third party verification (albeit with some gaps in capacity at the decentralized level).

Quality-at-Entry Rating Satisfactory

b. Quality of supervision

Project supervision benefited from continuity in the project coordination unit, which helped ensure smooth implementation and effective coordination with other sector operations. Fiduciary and M&E functions were effectively carried out, although given the critical importance of project monitoring to trigger disbursements, the M&E arrangements were heavily reliant on decentralized entities (which needed fundamental change in mindset from the traditional input-based financing to results-based financing for which quality and timely data were needed) and volatile regions (in which disruptions in services and data collection were a significant risk). DLI targets were ambitious, in line with GPE's variable grant model, with the ICR (page 27) noting that "the implementation period was too short in which to achieve them." The Bank team provided intensive support to the third party verification agent, but issues with timeliness of reporting and quality of data remained throughout the project period.

Quality of Supervision Rating Moderately Satisfactory

Overall Bank Performance Rating Moderately Satisfactory

9. M&E Design, Implementation, & Utilization

a. M&E Design

The key project indicators were specific and monitorable, included baseline and target data, and were clearly linked to each of the key activities. The DLIs, which were not directly measuring results but used to trigger disbursements, had detailed protocols to ensure transparency and accuracy. The Central Statistical Agency, which was designated as the third party verification agent for DLIs, was provided with detailed instructions for the technical aspects of verification. Project monitoring arrangements were

clear, with regional education bureaus reporting on data on implementation progress. Given the pilot nature of several of the key activities, evaluative activities were included in the M&E design to draw lessons.

b. M&E Implementation

The third party verification agent, with intensive support from the Bank team, was able to provide reports on DLIs, albeit with frequent delays. As noted in the ICR, this was the first results-based financing operation in the education sector, and there was a steep learning curve for both the Ministry of Education and the verification agent. Data quality was a concern, mainly due to manual data collection and entry at the local education bureau and school level, thereby delaying data reporting to the regional education bureaus. Social unrest in some regions also contributed to data reporting challenges.

c. M&E Utilization

The monitoring data was used to trigger project disbursements, as well as to identify areas that needed improvement. The ICR cited numerous lessons learned from the pilot interventions to inform future operations, specifically GEQIP-E, including the following: ensuring quality of school improvement plans; importance of timely delivery of funds for school improvement plans; adapting pre-primary curriculum into local languages including finding qualified translators; need to inform school leaders on pre-primary programs to ensure integration into school budget, programming, etc,; modification of top-up supplemental budget for children with special needs into supplemental grants; and implementation of school-based monitoring system to track dropout rates.

M&E Quality Rating

Substantial

10. Other Issues

a. Safeguards

The project was classified as an Environmental Category "C" project. No safeguard policies were triggered.

However, a social assessment was conducted for the parallel GEQIP-II project, and the conclusions and recommendations from that assessment were consistent with this project. These included: providing O-Class education in local languages in pastoral and agro-pastoral areas; providing support to children with special needs, and incentivizing girls' education through increased appointment of female school principals.

b. Fiduciary Compliance

<u>Financial management</u>: The project's financial management arrangements relied on the country's existing public financial management system for the budget process, classification system, and compliance with financial regulations, and for expenditure management and control. Four financial management reviews were conducted over the project period. The audit report for the Ministry of Education as a whole was received on May 6, 2019, with a month delay, and contained an adverse audit opinion on the ministry's financial statements due to weak documentation of several expenditures and internal control, weak monitoring of advance and payable balances, and unsupported variation orders on various constructions. However, the audit findings related mostly to construction of universities that were outside the scope of this project. The Bank requested an update on the audit by June 30, 2019, and as a result of the review, excluded questioned expenditures from the project's eligible expenditure plan.

<u>Procurement</u>: As the project was a results-based financing project disbursing on the basis of eligible expenditure plans covering mostly recurrent expenditures, there was limited procurement of goods. Any procurement under the project was largely carried out under the sister operation GEQIP-II.

C. Unintended impacts (Positive or Negative)
 None reported.

d. Other

11. Ratings			
Ratings	ICR	IEG	Reason for Disagreements/Comment
Outcome	Moderately Satisfactory	Moderately Satisfactory	
Bank Performance	Satisfactory	Moderately Satisfactory	Quality of Supervision is rated Moderately Satisfactory due to difficulties in ensuring mitigation of issues with timeliness of reporting and quality of data, given weak regional capacity and volatility.
Quality of M&E	Substantial	Substantial	
Quality of ICR		High	
12. Lessons			

Lessons drawn by the ICR, adapted by IEG:

- A project involving pilot interventions can draw upon synergies with broader projects supporting sector programs. In the case of this project, the parent operations provided implementation support such as project coordination, procurement, and monitoring, while this operation took a more ambitious approach in its innovative design, financing modality, and stretch targets. Important lessons were learned from the pilot interventions, despite some shortcomings in project performance, that could then be applied to the sector program.
- Clearly defined indicators and protocols for verifying the meeting of targets, along with
 intensive technical support, are essential elements of a successful results-based financing
 operation. In the case of this project, significant support was provided by the Bank to change
 the client's mindset from an input-based to results-based approach, as well as to implement
 the precise process for verifying achievement of targets. Also, specific timetables for meeting
 DLIs were a constraint to accessing full financing.

13. Assessment Recommended?

No

14. Comments on Quality of ICR

The ICR articulated a clear theory of change for each discrete area of support, emphasizing the distinct, differing nature of each intervention implemented in different regions with varying aims. The ICR was overall consistent with guidelines. The quality of evidence and analysis was strong; of note, given the pilot nature of several interventions and the "stretch" nature of several targets, the ICR presented additional evidence beyond reporting on key project indicators and targets to provide a more comprehensive picture of project achievements. Lessons were specific, and thus informative given the innovative features of this project. The ICR was particularly notable in analyzing each pilot intervention and how the learning was applied.

a. Quality of ICR Rating High