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IMPLEMENTATION COMPLETION AND RESULTS REPORT

ON THE

IDA CREDIT

IN THE AMOUNT OF SDR 85.8 MILLION (US\$130.0 MILLION EQUIVALENT)

AND

MULTI-DONOR TRUST FUND GRANT

IN THE AMOUNT OF US\$400 MILLION EQUIVALENT

TO THE

FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA

FOR THE

ETHIOPIA GENERAL EDUCATION QUALITY IMPROVEMENT PROJECT II

July 26, 2020

Education Global Practice
Africa East and Southern Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective April 27, 2020)

Currency Unit = Ethiopian Birr (ETB) ETB 33.30 = US\$1

> FISCAL YEAR July 8 - July 7

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ABBREVIATIONS AND ACRONYMS

ABE	Alternative Basic Education (Centre)
AF	Additional Financing
APL	Adaptable Program Loan
CPD	Continuous Professional Development
CPF	Country Partnership Framework
CPS	Country Partnership Framework Country Partnership Strategy
CTE	College of Teacher Education
DFID	Department for International Development (UK)
ECE	Early Childhood Education
ESAA	Education Statistics Annual Abstract
ETB	Ethiopian Birr
ETWG	Ethiopia Education Technical Working Group
FM	Financial Management
GBV	Gender-Based Violence
GEQIP	General Education Quality Improvement Program
GER	Gross Enrollment Rate
GoE	Government of Ethiopia
GPI	Gender Parity Index
GTP	Growth and Transformation Plan
EMIS	Education Management Information Systems
ESDP	Education Sector Development Program
GPE	Global Partnership for Education
HDI	Human Development Index
IBEX	Integrated Budget and Expenditure
ICB	International Competitive Bidding
ICT	Information and Communication Technology
ICR	Implementation Completion Report
ICRR	Implementation Completion Report Review
IDA	International Development Association
IDP	Internally Displaced Persons
IEG	Independent Evaluation Group
IPF	Investment Project Financing
IRI	Intermediate Result Indicator
M&E	Monitoring and Evaluation
MDG	Millennium Development Goals
MoE	Ministry of Education
MoFEC	Ministry of Finance and Economic Cooperation
MTR	Mid-Term Review
NEAEA	National Education Assessment and Examinations Agency
NER	Net Enrollment Ratio
NLA	National Learning Assessment
PAD	Project Appraisal Document
PDO	Project Development Objective
PGDT	Post Graduate Diploma in Teaching
	, ,

PSTA	Parents, Students and Teachers Association
PTA	Parents and Teachers Association
REB	Regional Education Bureau
RF	Results Framework
SG	School Grant
SIP	School Improvement Program/Plan
TDP	Teacher Development Program
TEI	Teacher Education Institution
TLM	Teaching and Learning Materials
UNDP	United Nations Development Program
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
USD	US Dollar

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DATA SHEET

BASIC INFORMATION	
Product Information	
Project ID	Project Name
P129828	Ethiopia General Education Quality Improvement Project II
Country	Financing Instrument
Ethiopia	Investment Project Financing
Original EA Category	Revised EA Category
Not Required (C)	Not Required (C)

Related Projects

Relationship	Project	Approval	Product Line
Supplement	P161060-General Education Quality Improvement Program Phase 2 - GPE 2 Grant	11-Jul-2017	Recipient Executed Activities

Organizations

Borrower	Implementing Agency
Ministry of Finance and Economic Cooperation, Federal Democratic Republic of Ethiopia, Ministry of Finance	Ministry of Education, Federal Democratic Republic of Ethiopia

Project Development Objective (PDO)

Original PDO

The higher order objective for the eight years' program is 'Improving the quality of General Education (Grades 1-12) throughout thecountry'.

The specific PDO for GEQIP II is 'Improving learning conditions in primary and secondary schools and strengthening of institutions at different levels of educational administration'.

FINANCING					
		Original Amount (US\$)	Revised Ar	mount (US\$)	Actual Disbursed (US
World Bank F	inancing			-	
P129828 ID	A-53150	130,000,000		129,969,350	125,654,78
P129828 TF	-16684	100,000,000		100,000,000	100,000,00
P129828 TF	-18053	212,065,447		212,065,446	205,182,09
P129828 TF	-A4701	7,000,000		7,000,000	7,000,00
P129828 TF	-A4619	62,500,000		62,500,000	61,190,40
P129828 TF	-A6267	18,190,979		18,190,979	18,190,97
Total		529,756,426		529,725,775	517,218,27
Non-World B	ank Financing				
Total		0		0	
Total Project	Cost	529,756,426		529,725,775	517,218,27
KEY DATES					
roject	Approval	Effectiveness	MTR Review	Original Closin	g Actual Closing
129828	12-Nov-2013	18-Feb-2014	27-Jun-2016	07-Jul-2018	31-Dec-2019

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US\$M)	Key Revisions
11-Jul-2017	331.84	Additional Financing
		Change in Results Framework
		Change in Components and Cost
19-Jan-2018	423.07	Other Change(s)
22-Jun-2018	464.91	Change in Loan Closing Date(s)
28-Dec-2018	474.10	Change in Results Framework
		Change in Loan Closing Date(s)
		Change in Implementation Schedule
27-Jun-2019	483.35	Change in Results Framework
		Change in Loan Closing Date(s)
		Change in Implementation Schedule

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Moderately Satisfactory	Moderately Satisfactory	Substantial

RATINGS OF PROJECT PERFORMANCE IN ISRs

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	16-Jun-2014	Satisfactory	Moderately Satisfactory	55.15
02	18-Dec-2014	Moderately Satisfactory	Moderately Satisfactory	109.27
03	08-Jun-2015	Moderately Satisfactory	Moderately Unsatisfactory	129.67
04	22-Oct-2015	Moderately Satisfactory	Moderately Satisfactory	197.43
05	14-Mar-2016	Moderately Satisfactory	Moderately Satisfactory	210.58
06	23-Sep-2016	Moderately Satisfactory	Moderately Satisfactory	252.07
07	29-Mar-2017	Moderately Satisfactory	Moderately Satisfactory	316.12
08	03-Oct-2017	Moderately Satisfactory	Moderately Satisfactory	402.69
09	24-Jan-2018	Moderately Satisfactory	Moderately Satisfactory	423.19
10	23-Aug-2018	Moderately Satisfactory	Moderately Satisfactory	466.50

11	25 5 1 2040			470.04
11	25-Feb-2019	Moderately Satisfactory	Moderately Satisfactory	479.24
12	12-Sep-2019	Moderately Satisfactory	Moderately Satisfactory	501.09
SECTORS AND	THEMES			
SECTORS AND	THEIVIES			
Sectors				
Major Sector/S	Sector			(%)
Information a	and Communications Te	echnologies		3
	Information and Commu	-		3
Education				97
Public	Administration - Educati	ion		15
Prima	ry Education			40
Secon	dary Education			40
Tertia	ry Education			2
	Theme (Level 2)/ Them	e (Level 3)		
Major Theme/ Human Devel	opment and Gender	e (Level 3)		(%) 100
Major Theme/ Human Devel	opment and Gender			
Major Theme/ Human Devel	opment and Gender			100
Major Theme/ Human Devel	opment and Gender	n		100 100
Major Theme/ Human Devel	opment and Gender ration Access to Educatio	n		100 100 50
Major Theme/ Human Develon Educ	opment and Gender ration Access to Educatio	n	At ICR	100 100 50
Major Theme/ Human Develo Educ	opment and Gender ration Access to Educatio Education Financin	n g	At ICR Hafez M. H. Gha	100 100 50 50
Major Theme/ Human Develo Educ ADM STAFF Role	opment and Gender ration Access to Educatio Education Financin President:	n g At Approval		100 100 50 50
ADM STAFF Role Regional Vice	opment and Gender ration Access to Educatio Education Financin President:	n g At Approval Makhtar Diop	Hafez M. H. Gha	100 100 50 50
ADM STAFF Role Regional Vice Country Direct	opment and Gender ration Access to Educatio Education Financin President: tor:	n g At Approval Makhtar Diop Guangzhe Chen	Hafez M. H. Gha Carolyn Turk	100 100 50 50
ADM STAFF Role Regional Vice Country Director:	opment and Gender ration Access to Educatio Education Financin President: tor:	n At Approval Makhtar Diop Guangzhe Chen Ritva S. Reinikka	Hafez M. H. Gha Carolyn Turk Dena Ringold	100 100 50 50

I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

- 1. The General Education Quality Improvement Program (GEQIP, the Program) was originally planned as an Adaptable Program Loan (APL) with two phases and an overall objective to improve the quality of general education (Grades 1-12) throughout the country. GEQIP I (2009-2013) aimed to: (i) improve teaching and learning conditions in primary and secondary education; and (ii) improve management, planning and budget capacity of the Ministry of Education (MoE) and Regional Bureaus of Education (REBs). The Implementation Completion Report Review (ICRR 14572 dated January 21, 2015) for GEQIP I by the Independent Evaluation Group (IEG) rated the Outcome for that phase as Moderately Satisfactory. Instead of being processed as a second phase of the GEQIP APL, GEQIP II was processed as a stand-alone Investment Project Financing (IPF) operation, as the World Bank's investment lending reform that was rolled out in early 2013 had eliminated the APL as a distinct lending instrument. This Implementation Completion Report (ICR) covers the originally conceived second phase of the program (GEQIP II; 2013-2019).²
- 2. At the time of appraisal of GEQIP II (the Project), the Government of Ethiopia (GoE) was implementing an ambitious Growth and Transformation Plan (GTP; 2010/11-2014/15) which established a long-term goal of becoming a middleincome country with annual growth rates of at least 11.2 percent during the plan period. To achieve the GTP goals, GoE has followed a "developmental state" model with a strong government role in the economy, prioritizing sectors such as industry and agriculture, as drivers of economic growth and job creation. The GTP reaffirmed GoE's commitment to human development, and development partners' programs were broadly aligned with GTP priorities.
- 3. Whilst being one of the world's poorest countries, Ethiopia made substantial progress on social and human development during the implementation of GEQIP I. High economic growth helped reduce poverty, in both urban and rural areas, and Ethiopia was among the countries that made the fastest progress on the Millennium Development Goals (MDGs) and Human Development Index (HDI) ranking in 2005-2011³. Between 2005-2011, 2.5 million people were lifted out of poverty, and the share of the population below the poverty line fell from 38.7 percent in 2004/05 to 29.6 percent in 2010/11 (using a poverty line of US\$0.6/day). Because of high population growth, however, the absolute number of poor remained largely unchanged at about 25 million people. Public spending on education increased by 70 percent in real terms between 2003/2004 and 2011/2012, with school enrollment through grade 12 increasing from 10 to 19 million students during this period. GEQIP I focused on establishing the critical elements needed to improve teaching and learning conditions for students and management capacity within the sector, and achieved good progress on most Project Development Objective (PDO) level indicators. Progress was not uniform, however. There were persistent issues with access, equity and quality of education at the time of GEQIP-II approval.4

¹ On April 8, 2013 the World Bank rolled out an overhaul of its investment lending instruments, now called Investment Project Financing (IPF). The modality for phased projects is now provided for through a 'Series of Projects' (SOP) rather than APL. GEQIP phase II is considered the second in a series of two projects. Rather than considering triggers to move from one phase to another, the team assesses if the rationale of the program remains intact and what would be the impact of the performance of the previous project(s) in the series on the new one.

² As World Bank support for Ethiopia's program of educational quality improvement had been envisaged as a multi-phase engagement, the ICR comments briefly on performance towards the originally defined APL objectives, but does not rate overall program performance.

³ Human Development Index in the United Nations Development Programme (UNDP) reports.

⁴ At the time of GEQIP II approval, the country's per capita income of US\$370 was substantially lower than the regional average of US\$1,257 and among the ten lowest worldwide. Ethiopia is ranked 173 out of 187 countries in the Human Development Index (HDI) of the United Nations Development Program (UNDP).

- 4. Access to schooling remained an unfinished agenda. The Net Enrollment Ratio (NER) for primary education (grades 1-8) expanded rapidly from 24.9 percent in 1996/97 to 83.4 percent in the Government's 2007/08 Education Statistics Annual Abstract (ESAA).⁵ However, the progress toward universal primary education was faltering by 2009, with the NER growing at only 0.8 percent per annum, a level well below the 2.6 percent rate of population growth. Further, the relatively high NER for the full primary cycle masked the low participation rate in the second cycle of primary, with a low NER of 47.3 percent in 2010/11 (ESAA). The GTP set ambitious targets for the Ethiopian education sector: to increase primary NER from 87.9 percent in 2009/10 to 100 percent in 2014/15, and the gross enrollment ratio (GER) of general secondary education (Grades 9-10) from 39.7 percent to 62.0 percent over the same period.
- 5. The expansion in access to both primary and secondary education masked large regional variations. Ethiopia's emerging regions, in particular Afar and Somali, which contain sizeable pastoralist communities, had much lower enrollment rates than other regions, but in both cases the rate nearly doubled between 2006/07 and 2011/12. Another aspect of geographic location was the urban/rural divide: 81 percent of primary enrollment in 2011/12 was in rural areas. Only 14.5 percent of lower secondary enrollment was in rural areas, suggesting that children living in rural areas either had to travel to a secondary school in the nearest urban area or drop out altogether. The need to move to urban centers to pursue secondary education posed obstacles discouraging students from attending school and hindering their learning.
- 6. The gender gaps in favor of boys remained large in upper primary, lower secondary and even larger in upper secondary. There were several reasons why girls' access to education was constrained, including early marriage, personal safety especially when traveling long distances to school, demand for labor at home and other issues including gender-based violence (GBV), corporal punishment and bullying. There was a very large gender disparity in the teaching force, and this could have also been a factor contributing to girls leaving school prematurely.
- 7. Low learning achievements remained an issue. The National Learning Assessment (NLA) showed that improving learning achievements in Ethiopia remained challenging. Grade 4 students were tested in reading in mother tongue, English, mathematics, and environmental science, and Grade 8 students were tested in biology, chemistry, English, mathematics, and physics. Composite scores for each grade seemed to indicate that national learning results had actually deteriorated slightly over time. Equally problematic was the high percentage of students with poor competency levels in Grades 10 and 12—almost 55 percent of Grade 12 students-did not even obtain basic competency. Boys consistently outperformed girls on achievement tests.
- 8. Shortfalls in financing, limited supply of teaching and learning materials (TLM), inadequate qualification and motivation of teachers, limited non-salary recurrent expenditures, and weak leadership and management capacity of the education administration were also among the key challenges facing the education system. In 2007/08, perpupil recurrent expenditures in primary education were barely US\$22 and the share of non-salary recurrent expenditures in total recurrent expenditures was only 5 percent. In 2011/12, the textbook-pupil ratio for general education was 0.51:1 against the target of 1:1. The percentage of qualified primary teachers was only 55 percent. To ensure more equitable spending, improvements were required in the composition of education spending by reallocating government expenditure within the education sector from higher to general education.

⁵ The Education Statistics Annual Abstract contains summary data on student enrollment, teacher qualifications, school facilities, learning materials and grades 10 and 12 examination results. The data are disaggregated by level of education, gender and region to capture regional, urban/rural and gender disparities.

- 9. The World Bank Group's Country Partnership Strategy (CPS) FY 2013-2016 supported the GoE's agenda on structural transformation and implementation of the GTP, building on the progress achieved by Ethiopia. Through the provision of inputs for improved quality of education services, GEQIP II contributed to the achievement of the goals of the second pillar of the CPS "Enhancing resilience and reducing vulnerabilities" which included supporting Ethiopia in improving the delivery of social services.
- 10. The design of GEQIP II considered the lessons and achievements from the implementation of GEQIP I. These are summarized below and detailed in Annex 7.
 - (i) Increase the quality of general education throughout the country by improving teaching and learning:
 - Increasing the pupil to textbook ratio is important as availability of textbooks is positively correlated with students' National Learning Assessment results (ICR⁶, p. 11).
 - As in many other countries in the region, student assessment scores might have been negatively impacted by the enrollment of new students (ICR, p.15).
 - Between 2006/2007 and 2012/2013, the percentage of students passing the primary and secondary education completion exams improved⁷.
 - Schools that participated in the School Improvement Programs established committees consisting of teachers, parents and schools to prepare annual and three-year strategic plans. Closer cooperation between teachers and students, such as through teacher-parent conferences, was found to have a positive, statistically significant correlation with students' National Learning Assessment scores (ICR, p. 14).
 - (ii) Increase the quality of general education throughout the country by enhancing management, planning and budget capacity of the MoE and the REBs:
 - School Improvement Plans prepared by schools and Alternative Basic Education centers and approved by Parent-Teacher Associations/School Boards/School Improvement Committees aimed to identify challenges in schools, develop priorities based on these challenges, and prepare plans to address them, even though some schools received grants with delay.⁸
 - Annual work plans were developed by the MoE and regional directorates, the MoE conducted procurement
 of textbooks and teachers reported experiencing support for professional development from education
 bureaus on the regional and woreda level.
 - School grant audits were conducted with substantial delays and covered a smaller percentage of schools than initially planned; GEQIP II planned audits for a smaller percentage of schools.

Theory of Change (Results Chain)

11. Building on GEQIP I achievements, GEQIP II as the Government's flagship program in the education sector with pooled funding from development partners⁹, continued supporting the Government's focus on improving learning conditions in primary and secondary schools, and strengthening institutions at different levels of educational administration. To improve learning conditions in primary and secondary schools, GEQIP II focused on: (i) increasing

⁶ Ethiopia General Education Quality Improvement Project I (P106855). Implementation Completion and Results Report.

⁷ For example, Grade 12 national examinations reached 97.9 percent in 2012-2013, compared to 90.3 percent in 2006/2007 (noteworthy due to an increase in the number of Grade 12 students taking the national examinations, from 70,000 to over 167,000 or by 240 percent).

⁸ According to the Beneficiary Survey, the woreda levels experienced delays in obtaining funds from regional bureaus, faced budget shortages, and lacked trained personnel to implement the school grants program. Schools and Alternative Basic Education Centers, which were located in remote areas, experienced delays in receiving funding and lacked trained personnel to use funds and report fund utilization to the woreda level as required.

⁹ with pooled funding from International Development Association (IDA), Global Partnership for Education (GPE), the UK's Department for International Development (DFID), Ministry for Foreign Affairs of Finland, the Norwegian Agency for Development Cooperation, the United States Agency for International Development (USAID), the United Nations Children's Fund (UNICEF) and the Ministry of Foreign Affairs and International Cooperation of Italy.

availability and utilization of teaching and learning materials; (ii) increasing the availability of qualified teachers, advancing their skills and qualifications to improve the quality of teaching; and (iii) providing per capita grants to schools to support enhancement of learning conditions through continuous school improvement process. The project also focused on building capacity for education planning and management and strengthening the quality assurance and accountability systems and institutions (learning assessments and examinations, teacher and school leader licensing and school inspection). The Results Chain (figure 1) demonstrates how the contributions envisaged under the Project were expected to trigger changes and lead to the development outcomes.

Figure 1. Results Chain

<u>PROJECT</u>: PDO - 'Improving learning conditions in primary and secondary schools and strengthening of institutions at different levels of educational administration'

Components	Project Activities	Intermediate Project Outcomes	Outcomes
Component 1: Curriculum, Textbooks, Assessment, Examinations and Inspection	Supply of teaching and learning materials Provision of e-Braille display readers Support of assessment and examinations Roll-out of school inspection system	Increased access to teaching and learning materials, including for children with disabilities Better evidence on progress and determinants of student learning, and performance of schools Improved quality assurance and accountability	
Component 2: Teacher Development Program	Pre-service teacher training In-service teacher training Licensing and relicensing of teachers and school leaders	Improved content knowledge and pedagogical skills of teachers for the delivery of student centered teaching and learning Improved quality of school leadership	Improved learning
Component 3: School Improvement Plan	Support of school improvement planning Provision of school grants	Improved availability of operational and learning resources in schools Continuous participatory school improvement	conditions in primary schools Improved learning
Component 4: Management and Capacity Building, including EMIS	Support of EMIS capacity building and data collection Capacity building for education planning and management Capacity building for school planning and Management	Improved timeliness and quality of data for education planning and management, Increased capacity for planning and management (at central, regional, woreda and school levels)	conditions in secondary schools Strengthened institutions at different
Component 5: Use of Information and Communications Technology	Provision of ICT infrastructure to target educational institutions Development of integrated M&E and learning System Support of strengthening of the national policy and institution for ICT	Improved learning conditions in specific secondary schools and universities with ICT (E-cloud) Increased capacity for ICT in general education Improved M&E for selected ICT interventions	levels of educational administration
Component 6: Program Coordination, Monitoring and Evaluation, and Communication	Program Coordination Monitoring and Evaluation Communication	More effective project management, implementation and communication Timely monitoring of project progress, results and impacts towards institutional strengthening and improving learning conditions	

Project Development Objectives (PDO)

12. The PDO for GEQIP II, as stated in the Project Appraisal Document (PAD) and the Financing Agreement, was 'Improving learning conditions in primary and secondary schools, and strengthening of institutions at different levels of educational administration'.

Key Expected Outcomes and Outcome Indicators

- 13. The PDO included 3 sub-objectives (improving learning conditions in primary schools; improving learning conditions in secondary schools; and strengthening of institutions at different levels of educational administration) that were to be measured using 6 outcome indicators as described below:
 - a. "Improving learning conditions in primary and secondary schools" by: (i) student textbook ratio; (ii) percentage of teachers adopting active teaching methods; and (iii) percentage of schools using at least half of their school grants allocation for the school improvement plan (SIP) teaching and learning domain;
 - b. "Strengthening institutions at various education management levels" by: (iv) percentage of woredas¹⁰ in each region implementing school report cards; (v) increased MoE capacity for evidence-based decision making as reflected by the following proxy indicators: (a) reduction in dropout rate in Grade 1 by 5 percentage points by the end of GEQIP II; and (b) 25 percent of schools ranked Grade 1 and 25 percent of schools ranked grade 2 move up one grade respectively¹¹ 12.
 - c. The Results Framework included one general outcome indicator of the number of direct project beneficiaries.¹³
 - d. The PAD also presented a higher order objective for the eight years' program of the IPF and three higher level program indicators. However, as GEQIP II was no longer an APL, these are not evaluated or rated in this ICR.¹⁴

Components

14. The project was designed around six component, each focused on providing a key element needed to improve learning conditions and strengthen institutional capacity. Equity was to be addressed through the mainstreaming of a number of cross-cutting issues, including gender and special education needs. Support was focused on Ethiopia's four so-called emerging regions, 15 the most disadvantaged in the country.

Component 1: Curriculum, Textbooks, Assessment, Examinations and Inspection (US\$114.4 million)

15. Component 1 provided teaching and learning materials to Grades 0-12 and supported improvements to curriculum implementation. Institutional development included support to improved student assessments and a strengthened schools inspectorate. ¹⁶

Component 2: Teacher Development Program (US\$70 million)

16. This component was designed to (a) Enhance the training of pre-service teachers in teacher education institutions through: (i) improved selection of entrants to teacher training; (ii) provision of teaching and learning materials in the

¹⁰ Woreda (or district) is the third-tier administrative division of Ethiopia (after region and zone).

¹¹ Originally, ranking was based on self-assessments undertaken by schools.

¹² If a school scores below 50 percent on inspection standards, it is classified as level 1 (grade 1 school in GEQIP II PAD); if a school scores between 50 percent-69.99 percent, it is classified as level 2; if a school scores between 70 percent-89.99 percent, it is classified as level 3; and if a school scores between 90 percent-100 percent, it is a level 4 school. Level 3 and 4 schools meet the national standards.

¹³ The Results Framework also defined 23 Intermediate Outcome Indicators.

¹⁴ The higher order objective in the PAD was: "Improving the quality of General Education (Grades 1-12) throughout the country.

¹⁵ Afar, Benishangul-Gumuz, Gambella, and Somali.

¹⁶ The component built upon the quality interventions of GEQIP I: (i) improvement in the quality and relevance of the general education curriculum; (ii) increase in the supply of textbooks and other TLM; (iii) strengthened national assessment and examinations system, aligned with the national curriculum; and (iv) support for the newly developed schools inspectorate to ensure the implementation of the curriculum, use of educational materials, continuous assessment and all other contributions to quality improvement within the classroom.

teacher education institutions (TEIs); (iii) enhanced practicum for teacher candidates; (iv) in-service pedagogical training for teacher educators; (v) enhanced English language support in the TEIs; and (vi) provision of a training program for the alternative basic education centers (ABEs) facilitators, and (b) *Improve the quality of in-service teacher training through*: (i) enhancing the provision of continuous professional development at schools; (ii) providing English language training for teachers of English and developing a cadre of school-based English mentors to support all teachers using English as a medium of instruction; (iii) developing a teacher career structure, licensing and re-licensing system which recognizes professional development and behavior; and (iv) upgrading for primary teachers from a certificate qualification to a diploma qualification.

Component 3: School Improvement Plan (US\$255 million)

17. Component 3 was designed to support the strengthening of school planning, and to partly fund the school improvement plans through school grants. ¹⁷ This component comprised a combination of activities started and successfully implemented under GEQIP I and new activities initiated under GEQIP II. Specific activities for school improvement included: (i) providing training on linking SIPs with improved student learning; (ii) developing a simplified SIP framework for rural, isolated schools, smaller schools and ABEs; (iii) creating information campaigns for parents and communities to strengthen the community support to improved learning through the SIPs; and (iv) encouraging activities focused specifically on reading. In addition, "School Grants" (SG) interventions covered: (i) revision of SG guidelines to encourage use of funds for appropriate learning and teaching materials; (ii) additional per capita incentives for the most disadvantaged regions and disadvantaged students; (iii) introduction of performance-based incentives for encouraging improved learning outcomes through SGs in the second year of project implementation; (iv) strengthening the social accountability mechanisms through parents, students and teachers associations (PSTA) with intensive community involvement in planning and monitoring SGs; and (v) strengthening the grievance redress and complaint management mechanism at various levels of educational management to ensure efficient and equitable management of the grants.

<u>Component 4</u>: Management and Capacity Building, Including Education Management Information System (EMIS) (US\$21.7 million)

18. This component was designed to: (i) improve the effectiveness and efficiency of education planning, policy-making, management, evaluation and resource allocation and utilization through human capacity development and by strengthening the linkages at the federal, regional and woreda levels; (ii) strengthen participatory and evidence-based school planning, management and monitoring; and (iii) strengthen the EMIS by improving collection, accuracy of input data and use of system data for evidence-based planning, policy making, management, and evaluation (with special attention to the four emerging regions).

Component 5: Improving the Quality of Learning and Teaching Through the Use of ICT (US\$34.67 million)

19. Component 5 focused on the use of Information and Communications Technologies (ICT) by: (i) developing a national policy and institutions for ICT in general education; (ii) developing a national ICT infrastructure improvement plan for general education through strengthening the specification, procurement, distribution and management of ICT in secondary education and developing a capacity for producing digital learning content; (iii) developing an integrated Monitoring, Evaluation and Learning System for the ICT; (iv) providing teacher professional development in the use of ICT; and (v) piloting the use of e-Braille display readers in select schools.

¹⁷ The component was a combination of activities started and successfully implemented under GEQIP I and new activities under Phase II.

Component 6: Program Coordination, Monitoring and Evaluation, and Communication (US\$24.5 million)

20. This component focused on: (i) providing technical advisory support to strengthen the institutional capacity of education institutions at the federal level and to improve coordination between federal, regional and woreda levels; (ii) monitoring various activities supported through project interventions and evaluating the impact of these interventions; and (iii) using communications to increase awareness and ownership of GEQIP's components and ensure effective participation of all stakeholders.

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION

- 21. **Revised PDOs and Outcome Targets.** The PDO was not revised. The targets for outcome indicators were updated following the June 2016 mid-term review (MTR) and approved as part of Additional Financing (AF)/restructuring package (P161060) on July 11, 2017. The outcome targets were revised to better measure outcomes and reflect implementation experience.
- 22. Revised PDO Indicators. The revisions to the PDO Indicators are presented in Table 15 in Annex 6.
- 23. **Revised Components.** Following the MTR, the components were revised to better align project activities with the PDO. There were no changes in terms of deletion or addition of components. Adjustments focused on rearranging sub-components within components, and adjusting costs based on implementation experience. The revisions to components are presented in Annex 6 and summarized below:
 - National Learning Assessment, teacher licensing and school inspection were combined to constitute a subcomponent on quality assurance system under Component 4;
 - The subcomponent on provision of e-Braille readers under Component 5 was moved to Component 1 as the latter component already covered the adaptation and printing of Braille textbooks; and
 - Adjustments of costs by components: Contingency funds of US\$29 million were allocated to Component 2
 "Teacher Development Program" to cover the higher budget needed for upgrading the qualifications of primary
 teachers. Savings of US\$18 million from "Teacher Licensing and Program Coordination" were reallocated to school
 grants to cover new grants to support the education of children with disabilities and in O-Classes (6-year-old pre school in primary school compounds). An amount of US\$11.5 million (including US\$1.5 million from e-braille and
 US\$10 million from EMIS were reallocated to Component 1 to cover additional textbook and TLM provision.
- 24. Restructurings. GEQIP II was restructured five times. The first restructuring on July 11, 2017 was processed together with an AF in the amount of US\$69.5 million to cover the original financing gap and to adjust the project components and Results Framework (RF) following the finding and recommendations of the MTR. A second restructuring on January 19, 2018 formalized the allocation of the new financing source—the Multi Donor Trust Fund—to the Project as part of the GEQIP II pooled funding. This was done in line with the new cost-recovery model introduced by the World Bank in order to move towards full cost recovery from trust funds under the principles of transparency, fairness, simplification, standardization and consistent treatment across all development partners. With the majority of project activities completed as planned, and about 90 percent of proceeds disbursed and most funds committed, the next three restructurings requested Closing Date extensions mainly to complete the procurement and delivery of textbooks and installation of ICT infrastructure: (i) a third restructuring on June 22, 2018 extended the July 7, 2018 Closing Date to December 31, 2018; (ii) a fourth restructuring on December 28, 2018 extended the Closing Date to June 30, 2019; and (iii) a fifth restructuring on June 27, 2019 aligned the Project's implementation schedule and the target dates for indicators to the new Closing Date of December 31, 2019.

- 25. Additional Financing. The AF was mobilized to cover the costs associated with the Project's financing gap. At approval the total estimated financing requirements for GEQIP II totaled US\$550 million, but financing mobilized for the Project from IDA and development partners was equivalent to only US\$472.3 million. ¹⁸ Considering a reduction in the commitment from the United States Agency for International Development (USAID) from US\$20 million to US\$11 million and exchange rates fluctuations, the Project's financing gap at the MTR was estimated to be US\$85 million. To cover the estimated gap, the AF in the amount of US\$69.5 million was mobilized from the Global Partnership for Education (GPE) to contribute to financing GEQIP II program activities. At the same time, the AF had a mixed effect on the scope of the original Project: the scope was expanded to provide support for O-Classes, teacher training and assessments; but narrowed, for example, in relation to the implementation of school report cards and ICT.
- 26. Revised Results Framework. The RF was adjusted on several occasions to align it to the implementation challenges and reality on the ground following the 2016 MTR and as part of the AF and restructuring package approved in July 2017. More ambitious targets were set for four out of six PDO-level indicators including (i) textbooks availability and utilization; (ii) teacher effectiveness; (iii) percentage of schools using at least half of their school grant allocation for the SIP teaching and learning domain; and (iv) reduction in Grade 1 dropout rate. At the same time, an overly optimistic target for the share of low performing schools to be upgraded was revised downward. This revision was made as actual school inspection data revealed that approximately 80 percent of primary and secondary schools in the country were not meeting the national standards. Intermediate Result Indicators (IRI) and their targets were also revised following the findings and recommendations of the MTR, and as part of project restructurings in December 28, 2018 and June 29, 2019.

Rationale for Changes and Their Implication on the Original Theory of Change

27. None of the adjustments in the restructurings impacted the Theory of Change. The AF was mobilized to cover the financing gap and the RF adjustments and Closing Date extensions were undertaken primarily to reflect implementation experience.

II. OUTCOME

- 28. The ICR team completed the evaluation of the GEQIP-II project outcomes using the regular and split rating approaches¹⁹. Both methods resulted in the same **Moderately Satisfactory** rating for the overall project outcomes.
- 29. **The Project achieved impressive results in a difficult environment.** Its highly decentralized implementation, with activities spread across Ethiopia, at primary and secondary levels, in addition to activities at the federal level, was ambitious, yet instrumental in achieving continued results towards strengthening the country's education system. The Project's implementation was characterized by two distinct periods as follows:
 - (i) The first period up to the first project restructuring on July 11, 2017. During this period the project was able to make impressive progress, so that targets for several selected PDO indicators were made more ambitious.
 - (ii) The second period lasted since the first project restructuring to closing of the Project. This period was impacted by increased conflict, violence and internal displacement across the country (factors exogenous to the Project itself and its implementing agencies, and hence beyond their control). The increased civil unrest impacted both implementing agencies' ability to implement activities in certain areas, their ability to obtain timely data for reporting, and more importantly, families' ability and inclination to send their children to

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¹⁸ Estimate (subject to exchange rates fluctuations).

¹⁹ A split rating evaluation was conducted in line with the IEG ICR guideline for the following reasons: (i) the material changes made to the Project during the first restructuring; (ii) two very distinct periods in GEQIP-II implementation and progress; and (iii) a more nuanced and rigorous way of assessment.

school given mobility to other regions or fear of conflicts. Despite these challenges, the project continued to make progress towards its PDO, but outcomes that depended upon continued student attendance, suffered. GEQIP II did manage to continue making progress during this time of rising ethnic tensions, violence over border disputes and ongoing internal displacement in the country. The Project also successfully put in place systemic capacity (that is lasting). Once these conflicts are contained, the measures the Project helped put in place as described below will no doubt allow its implementing agencies to resume an improving trajectory towards its expected outcome targets.

- 30. The achievement of the PDO of improving learning conditions in primary and secondary schools and strengthening of institutions at different levels of educational administration is evaluated based on the achievement of the PDO indicator targets and additional evidence related to the achievement of project outcomes. The assessment of the PDO considers its three sub-objectives: (i) improving learning conditions in primary schools; (ii) improving learning conditions in secondary schools; and (iii) strengthening of institutions at different levels of educational administration.
- 31. Further, the project's original design, envisaged as the second phase of an APL, was modified during preparation to a standalone IPF project due to policy changes. Further, GEQIP I and GEQIP II, which were initially envisioned as 2 phases of an APL, together helped the Government achieve and sustain the higher-level objectives of the original APL program, and the specific objectives of the GEQIP II project. The results of these impacts under what would have been the APL program's higher objectives are presented in Annex 8.

A. RELEVANCE OF PDOs

Assessment of Relevance of PDOs and Rating

32. The GEQIP II PDO was highly relevant at the time the Project was designed and remained equally relevant at the time of its completion. GEQIP II, as the flagship investment program in the education sector, was fully aligned with the World Bank CPS for 2013-16 and World Bank Group Country Partnership Framework (CPF) for Ethiopia 2018-2022²⁰ as education quality and human resource capacity remain key drivers of Ethiopia's poverty reduction and prosperity enhancement.²¹ Specifically, GEQIP II responds directly to Focus Area 2, "Building Resilience and Inclusiveness," and Objective 2.4 "improved basic education learning outcomes" of the CPF. GEQIP II was also fully aligned to the GoE's Education Sector Development Plans for 2010/11-2014/15 (ESDP IV) and continues to be aligned with the strategies for 2015/16-2019/20 (ESDP V). Based on the above, the PDO relevance is rated **High**. Its relevance and importance only grew during crisis/conflict at the end of the Project since education plays a fundamental role in promoting interpersonal cooperation and understanding, and reinforcing social cohesion in the country.

B. ACHIEVEMENT OF PDOs (EFFICACY)

Assessment of Achievement of Each Objective/Outcome

33. Ethiopia has made tremendous gains in increasing access to education, which is a commendable achievement given its rapid population growth (about 2.5 percent per annum or more than 2 million people a year). Its primary and secondary school system expanded from 20 million learners in 2011/12 to around 26.7 million in 2017/18. This rapid

²⁰ World Bank Group Country Partnership Framework for the Democratic Republic of Ethiopia 2018-2022, Report No. 119576-ET dated May 22, 2017.

²¹ The program also reflected GPE's strategic goals in relation to equity, quality and efficiency.

expansion calls for the education system to keep pace by expanding its capacity and ensure conditions for learning for the growing school-age population are maintained or improved.

Project outcomes 1 and 2: "Improving learning conditions in primary schools" and "Improving learning conditions in secondary schools"

- 34. To improve learning conditions in primary and secondary schools, GEQIP II focused on three critical aspects which are described in greater detail below: (i) increasing availability and utilization of textbooks and other teaching and learning materials; (ii) increasing the availability of qualified teachers; and (iii) strengthening capacity of schools to improve teaching and learning conditions through preparation and implementation of school improvement plans under support of school grants. Since the project's achievements are applicable to all schools of general education (both primary and secondary), the first two objectives are considered together. The results of the relevant indicators disaggregated by school level are presented, and ratings are provided for each of the sub-objectives (i.e., primary and secondary).
- 35. Overall progress toward **project outcomes 1 and 2 "Improving learning conditions in primary and secondary schools"** is rated **Substantial** *before Project Restructuring and thereafter*. The PDO Indicators by which progress towards these objectives was evaluated, are presented in Tables 1 and 2 below.

Table 1: PDO Indicators for Project Outcomes 1 and 2 - Improving learning conditions in primary and secondary schools

PDO Indicator before Restructuring	PDO Indicator after Restructuring
1. Increased availability and utilization of	1. Increased availability and utilization of textbooks and other teaching and learning
textbooks and other teaching and learning	materials as measured by:
materials as measured by:	
1A. Student textbook ratio (reprints)	1A. Student textbook ratio (reprints)
-	1B. Textbooks availability for newly procured mother tongue textbooks
-	1C. Textbook utilization as measured by % of students that bring their textbooks to school
	(measured for primary level only)
2. Percentage of teachers adopting active	2. Teacher effectiveness measured as an index of average scores of school inspection
teaching methods	standards on teacher knowledge, lesson planning, teaching practices and assessment
	practices
3. Percentage of schools using at least half of	3. Percentage of schools using at least half of their school grants allocation for the SIP
their school grants allocation for the SIP	teaching and learning domain (target revised-increased)
teaching and learning domain	

Table 2: Progress towards outcome 1 and 2 – Improving learning conditions in primary and secondary schools

Inputs to Learning Conditions	Rating at Restructuring	Rating at Completion	
Teaching and Learning Materials			
Primary	High	Substantial	
Secondary	High	High	
Teacher Effectiveness			
Primary	Modest	Substantial	
Secondary	Modest	Substantial	
School Grant Utilization (primary and secondary)	High	Modest	
Overall Improving Learning Conditions			
Project outcomes 1 – Primary	Substantial	Substantial	
Project outcomes 2 – Secondary	Substantial	Substantial	

Teaching and learning materials

- **36.** Progress towards **PDO Indicator 1 "Increased availability and utilization of textbooks and other teaching and learning materials"** is assessed as **High** before restructuring and **Substantial** thereafter based on the progress achieved on increased access to these educational materials in both primary and secondary schools²².
- 37. **Textbook availability improved significantly under GEQIP II.** The provision of textbooks under GEQIP II aimed to respond to enrollment growth and book replacement. The Project was able to address critical shortages and provide core textbooks to more than 26 million primary and secondary school students at relatively lower unit costs compared to the Project's initial estimates and compared to other Sub-Saharan Africa countries (Section II C). In all, approximately 170 million textbooks and teachers' guides were procured and reprinted under the Project; of these, over 156 million were for the primary level and almost 21 million were for the secondary level. Importantly, this was done with better quality and durability of material thanks to: (i) introduction of higher technical standards and specifications for TLM, which increased the lifespan of textbooks to four years on average and helped reduce recurrent costs for reprinting; (ii) use of international competitive bidding and retainment of copyright; and (iii) a single-title textbook policy for core subjects with large print runs that helped achieve economies of scale. Progress towards the *PDO Indicator 1A target* is assessed as High for both *the primary and secondary levels before restructuring* and Substantial and High for *the primary and secondary levels respectively after restructuring* since, at the time of the project's first restructuring, the completion target for PDO Indicator 1A had been surpassed, with a student textbook ratio of 1:1²³.
- 38. Based on this strong performance PDO Indicator 1B was introduced in the RF at restructuring to monitor specifically the distribution of mother-tongue textbooks (for seven mother-tongue languages for grades 1 to 8), teacher guides and supplementary materials. Progress towards the *PDO Indicator 1B target*, introduced *after restructuring*, is rated **Substantial** (indicator refers to the primary level only). Although progress with textbook procurement and distribution slowed during the last two years of project implementation, additional textbooks were distributed over the last six months of implementation bringing the actual ratio of primary students to procured textbooks closer to the end target of 1:1.
- 39. **Textbook utilization, however, remained at a lower level.** With notable progress in textbook procurement and distribution, a new indicator was introduced during restructuring to measure textbook utilization: PDO Indicator 1C "percentage of students that bring their textbooks to school". A 2018 survey found that the rates of children bringing the books to school were much lower than anticipated, mostly due to: (i) the bulkiness of the books; (ii) the long walking distance to and from school; (iii) fear of theft/ damage; and (iv) a lack of bags to carry textbooks. Despite actions by the MoE requesting the regional education bureaus to cascade the need for textbook utilization in classrooms down to school leaders and teachers, the 2019 GEQIP II exit evaluation still showed low textbook utilization in all grades in classrooms: 51.77 percent for mathematics against a target of 90 percent; and 60.95 percent for science and 56.65 percent for social science against a target of 70 percent for each of these. Progress towards targets was likely impacted by delays in textbook distribution since utilization invariably is affected by availability, with difficulty

²² Originally, the Project's progress was to be measured by PDO Indicator 1A "ratio of primary students to textbooks". At the time of the first restructuring the original Project target was surpassed and the following indicators were incorporated to measure not only availability but also utilization of textbooks: PDO Indicator 1B "textbooks availability as measured by ratio of primary students to newly procured mother tongue textbooks"; and PDO Indicator 1C "percentage of students that bring their textbooks to school".

²³ For comparison, at the end of GEQIP I, with about 78 million textbooks produced and distributed to schools, the supply of teaching and learning materials in the core subjects of primary and secondary education (mathematics, mother tongue, English, and sciences) still remained insufficient. The student-textbook ratio (STR) for core subjects was 1:0.65.

to disaggregate the utilization in the classrooms between the reprints and new textbooks. Progress towards **PDO Indicator 1C target** is, therefore, rated **Negligible** (measured for the primary level only).

Teacher developments

40. The Project improved the supply of qualified teachers. By completion, teachers' effectiveness is rated Substantial as 46.4 percent of teachers in Level 1 schools and 59.5 percent of teachers in Level 2 schools met the qualification of the index (Annex 6) against targets of 45.4 percent and 59.3 percent, respectively, based on the 2016/17 and 2017/2018 reinspection report. Schools also improved performance on the index of teacher effectiveness—measured using average scores of inspection standards on teacher knowledge, lesson planning, teaching practice, and assessment practice. As part of teacher training, the Project supported in-service Continuous Professional Development (CPD) programs for teachers, both general and subject-specific, which was instrumental for improving teaching and learning in schools. The World Bank's programmatic education sector analytical work, "Ethiopia Education Sector Studies" (P152796), showed that teacher qualification generally has a positive association with learning outcomes.

Table 3: Progress towards Improving Teacher Qualifications

Intermediate Outcome Indicator	Original Target	Revised Target	Achieved at Completion	Rating Restructuring	Rating Completion
IR2 – Number of post-graduate diploma in school leadership (primary level, annual)	60.0	800	1,456	High	High
IR3 – Number of diploma graduates from Colleges of Teacher Education (primary level, annual)	Primary 90%; Secondary 100%	10,000	13,833		High
IR4 – Number of post-graduate diploma in teaching regular graduates from universities (secondary, annual)	100.0%	1,500	3,338		High
IR5 – Number of primary teachers upgraded from certificate to diploma (primary, annual)	90.0%	22,000	30,949		High
IR6 – Number of teachers upgraded from diploma to post-graduate diploma in teaching in summer	100.0%	13,000	18,347		High
IR7 – Number of teachers who received ELTIP training (primary, cumulative)	90.0%	10,000	71,052		High
IR8 – Number of G7-8 teachers who received Math and Science updating training (primary, cumulative)	90.0%	20,000	26,761		High

41. Progress towards improving teachers' qualifications, both at the primary and secondary levels, is supported by the number of teachers whose qualifications were improved, as reflected by the project's Intermediate Outcome Indicators (Table 3).²⁴ A total of 97,142 primary teacher trainees and 33,659 secondary teacher trainees graduated from diploma and post-graduate diploma teaching programs, 125,769 in-service primary teachers completed their upgrading programs from certificate to diploma, and 59,051 secondary teachers from Bachelor's degree (in non-

²⁴ In Ethiopia, Grade 1-4 primary teachers require at least a Diploma level of qualification; for primary Grades 5-8 and secondary Grades 9-10, teachers need to possess at least Bachelor's Degree; and for Grades 11-12 a Master's Degree is required.

teaching fields) to post-graduate diploma in teaching (PGDT). In addition, 71,052 in-service English language teachers, and 26,761 mathematics and science teachers attended short-term training programs as part of their continuous professional development. Between 2012/2013 and 2018/19, the proportion of qualified teachers with appropriate qualifications (diploma or degree) in Grades 1-4 increased from 43.8 percent to 88.8 percent; in Grades 5-8 the proportion remained at about 91 percent. This is an important achievement in light of a significant increase of primary teaching force by 36.6 percent, from 367,989 teachers in 2013/14 to 502,738 in 2017/18²⁵. Of the total number of teachers teaching in secondary (Grades 9-12), the proportion of teachers who meet the standard qualification for the level increased from 91.5 percent to 94.5 percent during the implementation of GEQIP II. The number of secondary school teachers increased by 63.9 percent between 2013/14 and 2018/19, from 70,987 to 116,345 teachers.

School improvement planning and school grants

- 42. The Project contributed to improving learning conditions by providing a per capita grant to all primary and secondary schools for implementing their school improvement plan (SIP). Progress towards school improvement planning as measured by *PDO Indicator 3* (Percentage of schools using at least half of their school grants allocation for the SIP teaching and learning domain) is assessed as *High* before restructuring and *Modest* thereafter. A robust mechanism for administration of school improvement planning, relying on the findings of external school inspections and internal self-evaluations, was put in place. The schools developed plans covering the domains of learning environment, and teaching and learning process, and these were financed by around US\$2 on average per student. ²⁶ SG payments were made to all government primary and secondary schools, based on the number of students enrolled in each institution (about 89 percent for primary ²⁷ and 11 percent for secondary). These funds were used for additional TLM, charts, graphs, maps, laboratory equipment, minor upgrades of school facilities (including for more accessible learning environment and minor refurbishments like ramps, disability friendly water points etc.) and to support continuous professional development of teachers. School improvement plans guided the use of school grants.
- 43. Progress towards *PDO Indicator 3* (*Percentage of schools using at least half of their school grants allocation for the SIP teaching and learning domain*), was surpassed at the MTR (reached 100 percent against the original completion target of 50 percent). Based on this, the target was adjusted during the first restructuring to 100 percent. To evaluate the status of SG utilization in the subsequent two years, another SG evaluation was conducted in 2018. This evaluation revealed that only about 74 percent of schools complied and used at least half of their grants for the teaching and learning domain, reflecting some progress from the baseline, but below the revised target of 100 percent. ²⁸ This was partly due to variations in priorities across schools in contrast to what was described in the SG guideline. The survey also showed that only 32 percent of schools had received the school grant by October 31, 2017 (against the target of 80 percent). However, almost all schools received school grants during the school year, despite the delays in fund transfers occurring at either regional level or woreda levels²⁹.
- 44. The Project also supported expansion of early childhood education (ECE) through the provision of SGs to schools with O-class programs. The first restructuring adjusted the SG program to also include education in O classes, distributed to schools based on the number of O-class students. Although not entirely attributable to the Project, the ECE GER increased from 17 percent in the 2011/2012 school year to 40.8 percent in 2018/2019 (over 3.2 million children), with growth mainly from the provision of O-class program in primary schools (about 65 percent of all

²⁵ Education Statistics Annual Abstract 2011 E.C. (2018/19).

²⁶ Amounts vary by education sub-cycles.

²⁷ Includes about 10 percent for O class students.

 $^{^{\}rm 28}$ Presumably due to more rigorous second evaluation vis-à-vis the first one.

²⁹ For example, schools which have not reported on the utilization of the SG in the past.

preprimary enrollment takes place in this category).³⁰ According to the 2018 evaluation study, the O-class SGs were mainly used to procure TLMs for preschool children.

Table 4: 2018 SG evaluation results

SSG evaluation results	% of schools
Schools plan the SG budget jointly with the SIP committee and wider school community members and	92.5
stakeholders	
Schools have SIP committee preparing annual report on results of the implementation of SIP	90.4
Schools have a SIP plan aligned with the SG allocations	81.1
Schools had their SIP committee's report discussed publicly at school with the school community and	78.8
other stakeholders	
Schools posted their SG allocations at the public notice board	38.5
Parents and Teachers Association (PTA) members' views on SG and SIP programs	% of PTA members which
	agree or strongly agree
SG program helps improve the learning conditions in schools	98.1
SG program helps with key necessities in our school such as chalk and paper	96.2
SIP practices increase participation of school community in the decision-making process about school	94.3
matters	
SG program empowers schools to make informed financial decisions based on actual needs in schools	92.4
SG resources are allocated transparently with participation of internal & external stakeholders	92.3
SG program helps enrich a library in our school	88.4
SG program helps build separate latrines for boys and girls in the school	80.8

Project outcome 3 "Strengthening of institutions at different levels of educational administration"

45. The project had an important impact on the strengthening of institutions at all levels of Ethiopia's educational administration. The Project's strong institutional impact is perhaps best measured by progress towards several Intermediate Outcome Indicators that captured strengthened national learning/education assessment capacity (IO indicator 3), established teacher licensing and inspection systems (IO indicator 8), and regular preparation and dissemination of education statistics (IO indicator 14); the institutional impact is not necessarily captured by progress on the PDO Indicators selected to measure project outcome 3 (Table 5). PDO Indicator 3 (described above) also reflects the increased capacity of the system at different levels and school administrations to allocate at least half of their school grants allocation for the SIP teaching and learning.

Table 5: Progress towards Project Outcome 3 – Strengthening of institutions at different levels of educational administration

Strengthening Institutions	Rating at Restructuring	Rating at Completion	
National Learning Assessment System	Substantial	Substantial	
Teacher and School Leader Licensing	Substantial	Substantial	
Education Statistics	Modest	Substantial	
ICT in Education	Modest	Modest	
School Report Cards	Substantial	n/a	
Reduction in Grade 1 Dropout	Substantial	Negligible	
School Inspection and Upgrading of Schools	Modest	Substantial	
Overall progress	Substantial	Modest	

³⁰ Kindergartens have 804,225 enrollees and child-to-child provision reached 229,921 children in 2018/19.

- 46. Overall progress toward PDO "Strengthening of institutions at different levels of educational administration" is rated **Substantial** before Project Restructuring and **Modest** after Project Restructuring. In line with ESDP V priorities, GEQIP II supported establishment and/or strengthening of the quality assurance and accountability systems at various levels: (i) of teacher and school leader skills through licensing system; (ii) of the school's teaching and learning conditions and environment through inspection system; and (iii) of overall system performance through student performance assessment system. These systems are essential to evaluate and improve sector performance.
- 47. GEQIP II contributed to rolling out the school inspection system and the upgrading of low-performing primary and secondary schools. Ethiopia's school inspection system, developed under GEQIP I, includes an annual school selfassessment and an external inspection every three years. The inspection framework is robust and consists of seven standards on school inputs, fourteen standards on processes, and five standards on outcomes. Based on the aggregate percentage score in these twenty-six standards, schools are classified into four levels of performance, with Level 3³¹ and Level 4 meeting the national standard (while Level 1 and 2 are below standard). The School Inspection Framework was introduced at the time of approval of GEQIP II, in 2013, and in 2013/14, about 22,205 primary and secondary schools were inspected.³² At the time of the first restructuring, the original target for the share of low-performing schools to be upgraded was revised downward since actual school inspection data revealed that approximately 80 percent of schools in Ethiopia did not meet the national standards. Plus, inspection of about 40 thousand schools all over the country was done in stages according to School Inspection Framework and took several years. Therefore, the baseline for performance of schools on inspection standards only became available by the time of the MTR. The project had significant impact on upgrading of low-performing schools. The results of the 2016/17 and 2017/18 reinspection of 21,363 schools showed that 57.5 percent and 8.5 percent of Level 1 and 2 schools, respectively, were upgraded to the next level as per inspection performance ladder, against targets of 10 percent and 5 percent, respectively. The percent of Level 1 schools that were upgraded actually exceeded the more ambitious original target of 25 percent. The experiences gained in the process of turning around the low-performing schools and upgrading those are very important, since the majority of primary and secondary schools in the country need to be upgraded to meet the national standards.
- 48. **GEQIP II established the teacher and school leader licensing in the country.** More than 404,160 primary and secondary school teachers and 14,257 school leaders took part in the licensing exam. Further, 24 percent of them participated in portfolio assessment, which is the second stage of licensing process. Overall, 31,000 teachers received licensing certificates, while the remaining are under assessment. The licensing system helped MoE and regions assess content and pedagogical knowledge to support and strengthen teacher development, as a cornerstone for teacher management. A strengthened evaluation process and additional quality assurance informed improvements to teacher training in Colleges of Teacher Education (CTEs) and universities supplying trained teachers. School principals and supervisors were also supported through a professional development program that focused on school leadership and management.
- 49. The Project strengthened the National Learning/Education assessment capacity. Under the Project, NLA capacity was strengthened through development of calibrated test items and administration of Grades 4, 8, 10 and 12 NLA tests and Grade 10 examinations, early grade reading assessment and training to enhance regional capacity in test development and administration for Grade 8 examinations. By completion, the National Education Assessment and

³¹ Levels are named "grades" in the GEQIP II PAD and RF.

³² Out of the total 22,205 inspected schools, detailed data in the 26 standards are available for 18,372 schools (55 percent of the total number). For the Afar region, detailed data are available for only 190 schools (33 percent of schools in the region). Based on the experience to date, the best-performing schools near the education bureaus are inspected first, so the situation in the region is likely to be more dire.

Examination Agency developed and validated 5,160 NLA test items, and 15,220 test items for grade 10 national examination. These items were added using the item bank management software procured under the project. The project also supported capacity building for regional examination including for improved development and administration of Grade 8 regional examination. The National Education Assessment and Examination Agency provided training for regional assessment and examination experts on conceptual overview of assessment, test development, test analysis and data capturing; and for Grade 8 test developers and exam administration focal persons on how to write, review and edit examination items based on the national curriculum framework. Furthermore, adaptation of Measuring Early Learning Quality and Outcomes (MELQO) tool to six local languages was completed and piloted under GEQIP II.

- 50. Under support of GEQIP II a school inspection system yielded individual school performance reports, de facto serving the function of increased school accountability. Moreover, self-evaluation reports prepared by the schools under support of GEQIP II (with community-based school management and decision making process) focused on identification of their strengths, weaknesses and goals to plan and ensure continuous school improvement. In light of that, PDO Indicator 4 "percentage of woredas in each region implementing school report cards" was dropped in the first restructuring.
- 51. The Project also focused on tackling the Grade 1 dropout. To improve school attendance and ensure children's successful transition to and retention in Grade 1, the REBs (i) sensitized communities on the importance of student participation/attendance in early years of schooling; (ii) supported improvement of education quality through teacher training; and (iii) strengthened the links between the SIPs and the inspectorate system, thereby reinforcing a focus on improved school attendance/completion.³³ At the school level, *Asmelash* committees (comprised of parents, teachers and community members) worked with out-of-school children and their parents to ensure that those who dropped out of school re-entered and continued their education. These activities were largely successful in reducing Grade 1 dropout until the MTR. Three cohorts of Grade 1 students (over 0.5 million children) benefited from reduced dropouts as compared to the baseline. However, by completion, violence in the country had increased significantly and spread to new areas, resulting in school closures and the displacement of people and thereby increasing the number of dropouts throughout the country.

Table 6: Grade 1 Dropout Rates at the National Level (%)34

	Baseline	2014/2015	2016/2017	2017/2018	2018/2019
National	25.0	21.4	18.1	19.5	25.0

52. Finally, and more importantly, over and above the challenges that the measurement of progress towards indicator targets at the time of restructuring and at completion, the simple numbers presented by these indicators fail to recognize the enormous institutional progress and capacity that the Project helped build in the various levels of the country's educational administration. Regular annual education statistics production allowed MoE to better plan activities and monitor sector developments. Progress on ICT in education, however, remained limited (Annex 1).

³³ This built also upon the findings of the Ethiopia Education Results Based Financing Project pilot.

³⁴ Note: While the quality of EMIS data needs further improvement, the timeliness of the education statistics annual abstract has significantly improved under support of the project.

Justification of Overall Efficacy Rating

53. Overall efficacy of **GEQIP II** is rated **Substantial** before and after Project Restructuring, since the Project operation almost fully achieved its objectives of "Improving learning conditions in primary schools", "Improving learning conditions in secondary schools" and "Strengthening of institutions at different levels of educational administration". Once the COVID-19 pandemic and conflicts are contained, and schools reopen across the country, the systemic capacity that the Project helped put in place will no doubt allow the Government to resume measures to regain the progress on dropouts reduction.

C. EFFICIENCY

Assessment of Efficiency and Rating

- 54. The Project's efficiency is assessed based on its economic efficiency, its cost efficiency, and its implementation efficiency, as described below.
- 55. Economic efficiency. The economic analysis in the Project's original PAD identified a range of minimum effect sizes that Components 1, 2 and 3 would need to have on cognitive skills in order to justify investment. Increased cognitive skills and subsequent human capital resulting from better quality education would produce a future stream of benefits in the form of higher earnings. For consistency, for this ICR an effect size of Components 1, 2, and 3 was modeled based on achievements under the components and the association between similar indicators and learning outcomes in the 2015 NLA. The 2015 NLA's questionnaires were modified to help evaluate Components 1, 2, and 3. A modeled effect size of 0.22 standard deviations was constructed based on modeling assumptions described in Annex 4. The ex-post modeled internal rate of return was 13.5 percent. As a sensitivity analysis, the probability distribution of the modeled internal rate of return based on the sampling distribution of the modeled effect size was estimated. Under this probability distribution, an internal rate of return of less than 10.7 percent was unlikely, having a probability of less than 5 percent.
- 56. Cost Efficiency. Under GEQIP II, unit costs for reprinting and distributing primary and secondary textbooks in 2015/16 have continued to be lower (US\$0.47 and US\$0.74, respectively), lower than those under GEQIP I (and comparison of GEQIP I unit costs with other countries of the regions is presented in Table 7). Initially, GEQIP II was able to provide core textbooks to more than 26 million primary and secondary school students at relatively lower unit costs compared to the Project's initial estimates and compared to other Sub-Saharan Africa countries fig. generating significant savings while at the same time ensuring better quality and durability of materials. The relatively lower textbook costs in Ethiopia result from several factors including: the use of international competitive bidding (ICB), which bundles development, printing, and distribution; the use of quality and price as factors for evaluation; a copyright agreement that allows the government to reprint at no additional cost; and large print runs (due to the large number of students and the decision to offer a single title per subject per grade, which led to economies of scale). The procurement process generated US\$25 million in savings due to the competitive price obtained. During the first years of

³⁵ Woldetsadik, Girma; Raysarkar, Chandrani. 2017. Textbook Provision for All in Ethiopia: Lessons Learned from the General Education Quality Improvement Project. World Bank, Washington, DC.

³⁶ Ibid.

implementation, textbook procurement exceeded expectations with more textbooks being procured and distributed than planned and at a lower price.

57. Implementation Efficiency. The Project disbursed 98.4 percent of project proceeds. The Project, including its scaling up under the AF, was implemented in slightly over six years, with three six-month closing date extensions. Despite all the challenges, including increased conflict and violence, the majority of project activities were completed as planned, by the original Closing Date. The cumulative eighteen months extension was required mainly to complete the procurement and delivery of textbooks and installation of ICT infrastructure. The final allocation of funds is provided in Annex 3.

Table 7. Textbook cost for Grade 1, selected countries

Country	Number of required books	Price (US\$)	Cost of textbook set (US\$)	Assumed book life (years)	Target textbook- student ratio	Annualized costs per pupil (US\$)
Benin	6	2.70	16.20	n.a.	1:1	n.a.
Burundi	9	1.00	9.00	2–3	1:1	3.00-4.50
Chad	2	5.00	10.00	1	1:1	10.00
Côte d'Ivoire	3	3.00	9.00	1	1:1	9.00
Kenya	8	3.80	30.40	4	1:1	7.65
Madagascar	8	0.75	6.00	2	1:1	3.00
Mali	3	4.50	13.50	2–3	1:1	4.53
Namibia	3	7.50	22.50	5	1:2	2.25
Rwanda	4	2.50	10.00	4	1:1	2.50
Median	5.5	3.75	14.25	3	1:1.5	6.125
Ethiopia	4	1.14	4.56	3-4	1:1	1:14-1.52

Source: Read 2015; author's estimate for Ethiopia.

Note: n.a. indicates not available.

Source: Woldetsadik, Girma; Raysarkar, Chandrani. 2017. Textbook Provision for All in Ethiopia:

58. Efficiency of the GEQIP II is rated **Substantial** based on its High economic and cost efficiency, and Modest implementation efficiency is influenced entirely by the period following the project restructuring that was impacted almost exclusively to factors beyond the Project's control (i.e., conflict, civil unrest). Before that, implementation efficiency would no doubt have been considered High, especially since implementation had been so expedited that the Project was overachieving several expected outcome targets, and on track for completion as planned.

D. JUSTIFICATION OF OVERALL OUTCOME RATING

59. The project's overall outcome rating is based on the High Relevance of its PDO, and its Substantial Efficacy and Efficiency. Overall Outcome is rated **Moderately Satisfactory**, however, based on less than expected progress on two PDO Indicators: PDO Indicator 1C (Textbook utilization as measured by percentage of students that bring their textbooks to school), which reflects the usage of textbooks acquired, and PDO Indicator 5 (Reduction in dropout rate in grade 1 by 5 percentage points by the end of GEQIP II). Both of these indicators reflect the actual impact, at the primary level, of the various activities and inputs supported by the project. Civil unrest during the project's final years impacted progress towards targets of both of these indicators. However, once the environment stabilizes, with lessons

of experience, the activities and inputs the project supported, together with other sectoral assistance, are expected to improve progress towards both textbook utilization and the reduction in Grade 1 dropouts.

E. OTHER OUTCOMES AND IMPACTS

Gender

60. The gender parity in general education improved during the lifetime of the APL program though the progress was not even. The gender parity index (GPI) at the primary level improved from 0.67 in 1999/2000 to 0.93 in 2013/14 but then fluctuated around that achievement. Afar, Ethiopia Somali and Benishangul-Gumuz lag significantly behind other regions of the country. Within the schooling cycle, gender differences in dropout rate are the highest at the upper primary level (grades 5-8), around the time they reach puberty. This can be partly explained by the gender norms in these three regions, especially in relation to early marriage, and social roles. The median age of first marriage is 15.9 in Benishangul Gumuz, 16.8 in Afar and 17.6 in Ethiopia Somali (DHS 2016). Fertility rates are high and rising in Afar and Ethiopia Somali. To reverse this trend, Ethiopia has made ending child marriage, estimated to result in economic benefits of US\$4.9 billion by 2030,³⁷ a target under the Sustainable Development Goals and an integral part of the 2013 national strategy against harmful traditional practices. In addition, exposure to gender-based violence in schools reduces girls' classroom participation, lowers their school performance, increases their grade repetition and dropout rates. Supply side issues also pose huge challenges. In 2018, only about 40 percent of primary schools had separate latrines for girls, which is a significant constraint to girls' education. The follow-on GEQIP-E Program for Results focuses on addressing these constraints to improve enrollment and progression of girls in upper primary and secondary grades.

Institutional Strengthening

61. Institutional strengthening was an explicit objective in the Project's PDO. A complete assessment of progress towards this objective, strengthening institutions at various education management levels, is provided in Section II B.

Mobilizing Private Sector Financing

62. N/A

Poverty Reduction and Shared Prosperity

63. The Project did not have a specific poverty reduction objective. Overall regional disparities in consumption levels and poverty are limited in Ethiopia, though the country's pastoral regions lag on human development outcomes and were supported through top-up school grants.

Other Unintended Outcomes and Impacts

64. N/A

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

65. Preparation within the context of sectoral assistance program by the World Bank. The World Bank, together with

³⁷ Source: Economic Impacts of Child Marriage (Conference Edition) March 2018.

Ethiopia's other development partners, have provided consistent support to the Government's national strategy for education since 2009, first with GEQIP I and then with GEQIP II operations. Both operations were the flagship investment programs in general education, nested within the Government sector strategies (ESDP IV and ESDP V). GEQIP-II design incorporated lessons learned from the implementation of GEQIP I on enhancement of teaching and learning conditions in schools and enhancement of management, planning and budget capacity of the MoE and the REBs. GEQIP II was fully in line with the Word Bank Country Partnership Strategy (2013-16) and with the Country Partnership Framework (2017-21) as education quality and human resource capacity continue to be key drivers of Ethiopia's poverty reduction and prosperity enhancement. The program also reflected GPE's strategic goals in relation to equity, quality and efficiency.

- 66. Financing instrument. GEQIP series, funded under a pooled arrangement by IDA and development partners through a Multi-Donor Trust Fund, was originally approved as a two-phase APL in support of the Government's ESDP IV that translated the Government's strategic goals into a program of action for the education sector. This multi-phase approach was deemed appropriate since the expected implementation period of a single project was not considered to provide enough time to yield quality improvements. With the extinction of the APL instrument in the Investment Lending Reform of 2013, the second phase of GEQIP was processed as a stand-alone Investment Project Financing.
- 67. Coordination with donors in the context of integrated assistance. The Project was included within the framework of donor coordination in the context of the ESDP, including the planning for ESDP V (2015/16-2019/20), the ESDP Joint Review Meeting in April and the Annual Education Conference in November of each year. As part of ESDP coordination, all donors supporting education participate in the Ethiopia Education Technical Working Group (ETWG) that meets monthly and reports to the MoE's Director of Planning and Resource Mobilization Directorate and a representative of a rotating donor partner.
- 68. Incorporation of lessons learned. The Project's design considered the comprehensive reform priorities of the GoE's General Education Quality Improvement Program (para. 10 and Annex 8). The Project's focus remained the improvement of quality of education through improvement of learning conditions and capacity building of the various levels of education administration. The technical design considered the experience and lessons from GEQIP I, the findings of the MTR of that first project and the comprehensive evaluation of GEQIP I, as well as relevant international experience.
- 69. *Identification of risks*. Project preparation correctly identified risks, and to the extent possible, actions to mitigate them both during preparation and implementation. During preparation, the team consulted with stakeholders from the central and regional governments to ensure understanding of and build ownership for the Project.

B. KEY FACTORS DURING IMPLEMENTATION

70. Donor coordination. GEQIP II was widely supported by development partners in Ethiopia. Under GEQIP II, pool of contributing development partners expanded. The following development partners financially contributed to the GEQIP II besides the World Bank: DFID, Finland, GPE, Italy, Norway, UNICEF, and USAID. During the GEQIP II implementation, the development partners have promoted harmonization among themselves and with the Government. The development partners all joined official missions as well as meetings with the government, provided technical inputs and closely monitored the progress of the implementation of GEQIP II. Ethiopia is considered a model of harmonized donor coordination, and the donors in the education sector through the ETWG have been consistently

supporting capacity building of government systems. This is important as funding from the GEQIP II was channeled through existing government financial management and other systems.

- 71. Government commitment. The Government remained committed to its ESDP V, and hence to the GEQIP series and the Project throughout, even following the change in Government leadership in early 2018. There was commitment from the national and regional governments to pursuing improvements in learning conditions, even if data collection from REBs faced difficulties and delays in light of increased conflict, violence and displacement at the end of the Project. The Government remains committed to this agenda as evidenced by its work on a number of strategic documents (such as an education sector roadmap through 2030, ESDP VI for 2021-25 and a new Education Act).
- 72. Conflicts. Violence in the country significantly increased and spread to new areas in 2017 impacting the implementation of the Project. Over 3 million internally displaced persons (IDP) were recorded in Ethiopia in 2019, four times as many as in 2017 according to the Internal Displacement Monitoring Center. Because of the conflict, schools were closed, and even when they were open, many children did not attend classes. Education authorities in conflict-affected and IDP-hosting regions were under significant pressure to reintegrate children into the schooling system, in addition to pressures to expand to keep up with the rapidly increasing school-age population. IDP children face significant psychological and emotional trauma as a result of displacement, loss of property and livelihoods, and destruction of social capital through disruption of communities and networks. Displacement is often most traumatic for women and girls, with female IDP facing an increased risk of sexual and gender-based violence (SGBV), sexual exploitation, and domestic violence. In addition, the social, psychological and emotional impacts of displacement may have significant impacts on the capacities of IDP children to learn and progress³⁸. Therefore, increased social unrest is a significant factor that affected the Project's achievements following the MTR, especially in the final years of implementation. For example, it affected the attainment of PDO-level end-of-project targets, particularly achievements made on grade 1 dropout reduction.
- 73. Continuity in Project Coordination and among Education Sector Projects. Project coordination was provided by the GEQIP II Coordination Office. It was headed by a Project Coordinator reporting to the State Minister for General Education in the MoE. The Project Coordinator was responsible for coordinating project activities both at the national level (with MoE) and regional level (with REBs). This included coordinating financial management, disbursements, procurement, monitoring and evaluation and other project-related initiatives, representing the projects at the ETWG meetings, and submitting periodic reports to the World Bank. More importantly, the Coordination Office provided considerable continuity in the coordination of education sector projects and ensured complementarity among activities under the different GEQIP projects. The Project Coordinator has been in his position since 2009 and participated in the preparation and implementation of GEQIP I, GEQIP II, and the follow-on GEQIP-E.
- 74. Synergies with other projects. GEQIP II had synergistic relationships with the first ever Results Based Financing Project (RBF, P163608) in the education sector. GEQIP II provided the overall framework to help guide the RBF's implementation (including in the procurement of needed goods and materials) and the sectoral dialogue and coordination to help it succeed. In its turn, GEQIP II benefited from the pilot experiences that the RBF was implementing. The ETWG and coordination of all projects and programs by the GEQIP II Coordination Office (GEQIP II, RBF and the follow-up GEQIP-E program for results) helped to reap the benefits of this synergy.

³⁸ World Bank. 2017. "Forcibly Displaced: Toward a Development Approach Supporting Refugees, the Internally Displaced, and Their Hosts." Washington, D.C.: World Bank Publications

IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

M&E Design

- 75. **Design.** The M&E system was designed to generate evidence of GEQIP II results and impacts towards improving learning conditions and institutional strengthening. At the school level, the focus was on ensuring progress on key indicators such as student-textbook ratio, teachers adopting active teaching methods and school grant utilization for improvement of teaching and learning priorities. At the woreda level, the focus was on strengthening the woredas' capacity in implementing school report cards. At the federal level, the focus was on strengthening MoE's capacity for evidence-based decision making as reflected in the following proxy indicators: (i) reduction in dropout rate in Grade 1, and (ii) the percentage of Grade 1 and Grade 2 schools that were upgraded and moved up one rank.
- 76. The Project's RF was generally well-designed, with six PDO Indicators and 23 Intermediate Results Indicators, all of which included baseline data and end-of-project targets. They were well aligned with the Project's objectives, although there were *moderate* weaknesses as follows:
 - (i) Overestimation of PDO Indicator 6 target: The PDO level target on upgrading of schools was overestimated as the School Inspection Framework was introduced at the time of approval of GEQIP II (in 2013). Inspection of about 40 thousand schools all over the country was done in stages, as planned, and took several years. Therefore, the data on performance of schools according to inspection standards only became available by the time of the MTR.
 - (ii) **Suitability of PDO Indicator 5:** The reduction in dropout rate in grade 1 is better suited to measure *internal efficiency* of the education sector, a higher-level objective compared to the institutional strengthening objective it was supposed to measure.
 - (iii) Large number of intermediate output indicators: The RF encompassed a large number of intermediate output indicators (23), many of which were updated following the MTR, as explained below.
- 77. The PAD acknowledged the substantial risk rating for delivery monitoring, on par with the substantial design risk (given the complex project with multiple components and multiple sub-components). As planned, the risk was mitigated by close monitoring of delivery through the comprehensive evaluation of GEQIP II at mid-term and end of project, comprehensive SG evaluations, and introduction of school audits and strengthened social accountability building on the existing PTAs. Similarly, the roll-out of the new inspection system, with the support of GEQIP II, was planned as an added monitoring mechanism (to provide information on the learning conditions at the school level).

M&E Implementation

78. In line with M&E design, the RF and arrangements for results monitoring of the GEQIP II PAD were used by the MoE to monitor implementation. REBs had the main responsibility for monitoring using data collected at the regional, woreda and school levels. The data were reviewed and compiled at the MoE level to feed into the M&E system. The heads of the MoE's technical departments and regions regularly reported on components/subcomponents progress, outputs and implementation shortcomings, and World Bank implementation support visits used these tables to review the progress with implementation. Several systems including EMIS, school inspection, teacher licensing, and learning assessments, were in place and/or were established, strengthened and/or institutionalized under GEQIP II to collect specific data at the school and student levels. In addition, since data quality was a concern, mainly due to

manual data collection and entry at the school and woreda levels, and difficulties by the woredas in delivering data to the REB, several external studies and evaluations were conducted including evaluations of teacher development program (TDP), school grants and the Project's overall impact via a comprehensive evaluation.

79. The Project's RF was adjusted as part of the AF and restructuring approved in July 2017. The revised RF introduced more ambitious targets, but in retrospect it would have been prudent to revisit potential risks more carefully before adopting these. By Project closing, ethnic conflicts and violence increased difficulties with data collection. Also, since EMIS data is lagged by one school year and inspection data are collected in batches, these developments at the end of project implementation did not provide sufficient time to further revise the PDO-level indicators and/or targets.

M&E Utilization

- 80. Relying on existing systems including EMIS, school inspection, teacher licensing, and learning assessments, and external studies and evaluations, the M&E framework provided a good basis for monitoring progress on activities and output indicators. More importantly, through the use of SIPs, SGs and other tools, the M&E systems provided input for informed decision-making and resource allocation to the RBE and school level by the MoE and to the MoE by the Ministry of Finance and Economic Cooperation (MoFEC).
- 81. Furthermore, the school inspection system rolled out nationwide under GEQIP-II yielded not only individual school performance reports, but also informed the MoE's strategy for upgrading of primary and secondary schools. Key quality assurance systems established and/or strengthened under the Project provided valuable inputs for Government policy documents, such as the MoE's Education Roadmap until 2030. These systems include: school inspection system (provides rich data on performance of schools); teachers and school leader licensing system (on performance of teachers and school leaders) and assessment and examinations system (student performance data).

Justification of Overall Rating of Quality of M&E

82. The **Overall Rating of M&E is Substantial**. This is based on the following ratings: Substantial for Design, Modest for Implementation and Substantial for Utilization.

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

- 83. **Financial management (FM) compliance**. The implementing agency ensured timely submission of good quality quarterly Interim Financial reports. The Project's annual external audit reports which include school grant audits, were submitted timely with unqualified opinions. The MoE took timely action on financial audit report findings. The initially encountered funds flow problems were resolved by introducing additional reporting on cash balances at the time of report submission and taking those into account when processing advances. The Project eventually was able to use Integrated Budget and Expenditure (IBEX) at federal and regional levels and maintained a stable finance staff at both levels. Further, internal control procedures remained intact throughout implementation.
- 84. Despite this progress, the Project also faced some challenges and led to important lessons. The preparation of Annual Work Plan and Budgets was delayed into the first quarter of every fiscal year, affecting implementation of the program. Universities always had the lowest budget utilization which could be either due to ambitious planning or weak capacity of the universities to implement the planned activities. Capacity building initiatives and supervision from MoFEC to regions and then downward to school level was weak. Although workshops were conducted with regions to highlight the main weaknesses noted in school grant audits, there were delays in addressing the findings and communicating the same to the World Bank. This, coupled with the small engagement of the internal audit in reviewing school grant, resulted in similar findings being reported year after year. The involvement of the MoFEC was

very minimal in monitoring school grants. The above challenges would have been tackled systematically should the Financial Management taskforce led by the Government met frequently to monitor progress and ensure compliance. Unfortunately, the taskforce meeting for GEQIP II was not efficient and effective. Irrespective of the challenges above, overall compliance of the FM covenants in the GEQIP II was adequate throughout implementation.

- 85. **Procurement compliance**. Implementation was off to a good start but with the increasing number and volume of procurements considerable delays were observed in evaluation of bids, contract award, and contract implementation in general. Despite repeated attempts, it was not possible to employ qualified procurement and contract administration staff, nor to strengthen the Procurement Directorate mainly due to the salary cap issued by the MoFEC for project staff. Lack of effective complaints handling and weak procurement oversight resulted in significant delays for textbooks and ICT infrastructure provision. Decentralized implementation, with many implementing entities and a weak capacity environment, made oversight and supervision very challenging. There was no system that enabled easy location of relevant procurement documents and there was no separate safe and secure place for procurement documentation at the MoE, REBs and Colleges of Teacher Education (CTEs). At the time of ICR preparation, some payments for the ICT and textbooks procurements are still pending, including due to unresolved disputes over taxes.
- 86. At appraisal, the procurement capacity of implementation agencies was considered weak. Procurement risks were correctly identified and included: (i) lack of proficient procurement staff in the MoE, REBs and other sub-national implementing agencies coupled with the lack of coordination and supervision; (ii) lack of systems and practices of accountability for both quality and timeliness of procurement and contract management decisions; (iii) lack of experience in procurement plan preparation and its use for monitoring procurement implementation and using it as a management decision tool; (iv) lack of effective procurement complaints handling and procurement oversight; (v) the decentralized implementation with many implementing entities; (vi) lack of expertise and experience in managing ICT procurement. The PAD identified procurement and other arrangements which, if implemented, would help mitigate the issues with procurements such as establishing competent procurement teams at the central and regional levels, early and regular familiarization of the implementing agencies with the procurement guidelines, regular procurement supervision, handholding and support of contract management etc. Repeated attempts to employ qualified procurement and contract administration staff by the MoE failed mainly due to the salary caps for project staff of the Government and resulted in the lack of effective procurement complaints handling and weak procurement oversight, important in Ethiopia's federal system with many implementing entities and weak capacity environment.
- 87. Environmental and social compliance. The Project was classified as Environmental Assessment (EA) Category C. As a result, none of the World Bank policies related to environmental and social safeguards were triggered. The activities financed by the Project did not have any issue of environmental and social safeguards concern. The MoE and most REBs allocated budget for cascaded trainings to address performance of identified social policies implementation assessment gaps of GEQIP-II. An attempt was made to address complaints related to GEQIP II through strengthening the existing Grievance Redress Mechanism at the federal level together with Ethics and Anti-corruption Directorate and plans to institutionalize it in the regions. MoE prepared social aspects implementation action plans and demonstrated coordination among its different directorates on their implementation (Gender Directorate, Special Support and Special Need Directorate, HIV/AIDs Directorate, Anti-corruption and Complaint Handling Directorate; and GEQIP Coordination Office). Still there were: (i) delays in institutionalization of the existing GRM, including establishment of up-take location and documentation at regional and Woreda levels; and (ii) weak follow-up and support to regions due to lack of employment of environmental and social safeguards experts.

C. BANK PERFORMANCE

Quality at Entry

88. Bank Performance for Quality at Entry is rated **Satisfactory**. The World Bank's preparation team worked closely with the Government and its donor partners to help prepare the next phase of assistance under the GEQIP-II. Originally contemplated as a second stage APL, the team adjusted its format to a stand-alone IPF given changes to the World Bank's investment lending framework. The stand-alone IPF nonetheless responded directly to and provided continuity to the Government's ESDP V through a pooled arrangement by IDA and development partners through a Multi-Donor Trust Fund. Further, as the project followed earlier World Bank and donor-supported assistance, it incorporated the wealth of lessons of earlier projects, together with findings of impact evaluations, beneficiary surveys and analytical work, both by the World Bank and by other donors. The preparation cycle took about 12 months from identification (September 2012) to appraisal (September 2013) and included four missions. Two World Bank task team leaders (TTLs) worked on project preparation. The GEQIP II PAD acknowledged "the substantial design risk given the complex project with multiple components and multiple sub-components". The project aimed to mitigate design risks with detailed explanations of proposed activities and direct links of each activity to the PDO. EMIS, school inspection, teacher licensing, and learning assessments, and external studies and evaluations provided a good basis for monitoring progress on activities and output indicators.

Quality of Supervision

89. The World Bank's Quality of Supervision is rated **Moderately Satisfactory**. Implementation support was provided by two country-based TTLs and a co-TTL, with continuity in support and reporting across the transition in leadership. World Bank supervision took place on a regular basis, providing just-in-time advice and observations to the Client, and regular coordination with the Government and its development partners through participation in, and periodic chairmanship of, the monthly ETWG. There were regular implementation support visits to Ethiopia, that included the appropriate skills mix to support and advise the Government on areas targeted by the Project, including fiduciary and social development staff. The Project made significant achievements in time of rising ethnic tensions, violence over border disputes and ongoing internal displacement in the country.

Justification of Overall Rating of Bank Performance

90. The Overall Rating of Bank Performance is **Moderately Satisfactory** based on **Satisfactory** rating for Quality at Entry and **Moderately Satisfactory** rating for Quality of Supervision.

D. RISK TO DEVELOPMENT OUTCOME

91. The risk to development outcome depends on the enabling environment at the national level as well as readiness at regional level to internalize and build upon project activities. The risks are mitigated mostly by the overall sectoral context through: (i) Government commitment; (ii) continued donor funding, at least through 2022, under the umbrella of the GEQIP series; and (iii) existing processes for strong donor coordination. The Government's commitment to education, and more specifically, improvements in access, efficiency, equity and quality continues to be very strong, as it is for improving learning outcomes and sectoral management through better systems. ESDP V is nearing completion, and ESDP VI was expected to be approved by June 2020³⁹ and focus on the same themes, including capacity development for improved management, general education quality and general education access, equity and internal efficiency in light of the large unfinished agenda. A successor to GEQIP II, GEQIP-E Program for Results financing in the amount of US\$440 million equivalent was approved on December 19, 2017, again with pooled funding

³⁹ the draft is under finalization, delayed due to COVID-19 developments

from donors and IDA, to continue supporting the ESDP series. GEQIP II focused on improving learning conditions and strengthening sectoral institutions; GEQIP-E maintains this focus and expands it to improving efficiency and equitable access—both priority programs in ESDP. Existing processes for donor coordination, namely the functioning of the ETWG, remain strong, with most sectoral decisions financed by donors channeled through the group for consideration. Although the Government was contributing an increasing amount of budget resources to the education sector, an important risk, therefore, would be that donors withhold funding, although this is not likely in the near future.

92. An important risk to development outcome stems from ethnic conflicts and violence across the country and the possibly protracted school closures to contain the spread of the Covid-19 both likely to affect school attendance in Ethiopia in the short-term, and, as a result, educational achievements in the longer-term. Given the higher ability of the better-off segments of society to home-school their children during the closure, the already high learning gaps between children of poor and better-off households, and rural and urban households are expected to increase. School closures can also lead to a decline in food intake among children of poor families who frequently rely on school feeding programs. Temporary school closures may also lead to permanent dropout of children from vulnerable households, especially in rural areas where drop-out is rife even in ordinary circumstances. As with the Ebola crisis, girls are more likely to permanently leave the schooling systems after a disruption than boys, and teenage pregnancy rates can be expected to increase. The long-term impacts of lost months of schooling and nutrition will be particularly severe for children in poor families, adversely affecting their human capital development and earning potential. The mitigation measures, including building the resilience of the education system to face such shocks and reintegrate the IDP children into the schooling system, are currently being developed in a consultative manner as part of ongoing GEQIP-E AF program preparation to ensure the end-result of more equitable access to quality education. Considering the above, the Risk to Development Outcome is **Substantial**.

V. LESSONS AND RECOMMENDATIONS

93. Projects may contribute to strong institution building, putting into place solid processes with longer term impacts, but the results of these efforts may not be apparent during the project's life, especially if exogenous factors affect its implementation. The results of GEQIP-II's institutional strengthening is impressive, with notable achievements in: (i) putting in place a robust mechanism for administration of school improvement planning, relying on the findings of external school inspections and internal self-evaluations; (ii) revising the School Improvement Framework and Guidelines to meet the needs of isolated schools and small schools, including ABEs, usually located in rural and disadvantaged areas; (iii) strengthening the National Learning/Education assessment capacity through development of calibrated test items (using item bank management software) and administration of Grades 4, 8, 10 and 12 NLA tests and Grade 10 examinations, early grade reading assessment and training to enhance regional capacity in test development and administration for Grade 8 examinations; (iv) adapting and piloting Measuring Early Learning Quality and Outcomes (MELQO) tool to six local languages; (v) establishing and implementing the teacher licensing system for primary and secondary school teachers and school leaders that has helped MoE and regions assess content and pedagogical knowledge to support and strengthen teacher development, as a cornerstone for teacher management; and (vi) strengthening the school inspection system, based on a robust framework that consists of seven standards on school inputs, fourteen standards on processes, and five standards on outcomes and overseeing annual school selfassessment and external inspection every three years. Each of these processes represents an important accomplishment, especially since they have become institutionalized as permanent processes. However, the results of these efforts may not be fully apparent during the project's lifetime mostly due to exogenous factors.

- 94. Projects can obtain significant savings in textbook procurement with a few up-front actions. GEQIP II succeeded in generating significant savings in textbook procurement while at the same time ensuring better quality and durability of materials. The relatively lower textbook costs result from several factors including: the use of ICB, which bundles development, printing, and distribution; the use of quality and price as factors for evaluation; a copyright agreement that allows the government to reprint at no additional cost; and large print runs (due to the large number of students and the decision to offer a single title per subject per grade, which led to economies of scale). The procurement process generated US\$25 million in savings due to the competitive price obtained. Further economies can be obtained by improving textbook distribution, especially in rural and remote schools, and storage facilities in schools.
- 95. Even though regular annual education statistics production processes may be in place, projects that finance activities in remote and poorly connected areas and rely on manual data collection into the EMIS system face particular challenges, especially in the time of increased conflicts and violence. Delays in compiling statistics makes it difficult to track the full range of issues a project may be facing in a timely manner. The Government is working to address this issue especially since this particularly affected timely monitoring of dropouts, an important efficiency indicator for the education system. Projects facing similar issues, should use rapid surveys and move away from paper-based to digital data collection, simplify the data entry work and ease the process of management and quick transfer of data to regional and national levels, supporting timely decision making and course correction. Sound validation mechanisms to verify data accuracy and reliability, increased efforts to fully analyze the collected data⁴⁰ and timely dissemination of the findings are important for planning and decision making at all levels.
- 96. Despite significant capacity building efforts, a project with a decentralized implementation modality, with many implementing entities in a weak capacity environment with high staff turnover, can face significant challenges if remuneration is capped at low levels. Under the project, procurement consultants were employed to support implementation, but repeated attempts to employ qualified procurement and contract administration staff to strengthen the MoE's Procurement Directorate failed due to Government salary caps. The lack of proficient procurement staff, in turn, hampered implementation efficiency as key procurements were delayed, particularly the provision of textbooks and ICT infrastructure.
- 97. Projects that aim to provide a continuous supply of inputs such as TLM in a timely fashion need to put in place proper distribution and inventory systems, while also encouraging government financing of textbook provision. In the case of the Project, the lack of such systems led to patchy data on the status and inventory of textbooks necessary to track and trace textbooks, facilitate inventory control, and plan for replacements that caused oversupply and shortages of TLM in various locations. Therefore, additional efforts and time were required to redistribute the textbooks locally. Systems to track the distribution and delivery of textbooks are important to ensure that they reach schools, including rural and remote ones without the delays at the beginning of the school year to avoid gaps in student learning. In addition, the Government financing of textbooks and other key education inputs such as school grants needs to be ensured with time in order to reduce dependence on funding from development partners.
- 98. Despite continued strong government commitment, increased and unforeseen conflict and violence, which is difficult to predict, can significantly affect an otherwise well-performing project's overall performance and outcomes, especially if it is triggered in the project's final implementation phase. Violence at the end of the project disrupted schooling across the country. Since this was spurred in the final stages of implementation, when most activities had been completed and extensions were required largely to complete pending procurements, it was not possible to restructure the project to adjust it to this reality. This was especially difficult since data on the impact of violence on

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⁴⁰ together with rich national learning assessments, school inspection, teacher licensing data

project indicators only became available with a lag, which because of conflict was delayed even further. It is difficult to speculate about potential sources or areas of conflict, but projects with decentralized implementation in areas where conflict may become a possibility, should err on the side of being conservative in defining indicators and setting targets, to account for possible delays in both implementation and data collection to monitor progress. In the event that a project such as GEQIP comes to be affected by conflict, it should be restructured to include activities to build social cohesion and provide integrated social space for both IDP and host community children, to provide phycological support to conflict-affected children and their families, ensure empowerment of girls and prevention of GBV and early marriage. In the particular case of Ethiopia, these challenges are being addressed under subsequent GEQIP-E Program for Results.

ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: Improving learning conditions in primary and secondary schools.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Textbooks availability and utilisation: ratio of primary students to newly procured mother tongue textbooks	Text	1:0.65 (2013)	1:0.90	1:1.00	1:0.74 based on the 2018 textbook survey; with additional textbooks distributed over the past six months, the ratio is closer to 1:1 target
		17-Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

Comments (achievements against targets):

Achieved (original target surpassed at the time of the first restructuring, and at completion). Indicator disaggregated into new PDO indicators 1B and 1C. (PDO level indicator 1B also achieved; the ratio is close to 1:1 target according to the procurement data).

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
				13.1801	·

Textbook availability and utilisation: Percentage of students that bring their textbooks to school	Text	1:0.65 (2013)	1:0.90	90% for math, 70% for science/social science (disaggregated by gender)	51.77% for math, 60.95% for science and 56.65% for social science (2019 GEQIP II exit evaluation)
		17-Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

New Indicator at Project's restructuring. Not achieved.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Teacher effectiveness measured as an index of average scores of school inspection standards on teachers? knowledge, lesson planning, teaching practices and assessment practices	Text	0.71	0.80	45.4% (Level 1); 59.3% (Level 2): progress in index	46.4% for Level 1 schools; and 59.5% for Level 2 schools based on the 2016/17 and 2017/18 reinspection report
and assessment practices		17-Oct-2013	17-Oct-2013	28-Dec-2018	31-Dec-2019

Comments (achievements against targets):

Achieved at completion on the basis of the revised target. However, as reported, there is a comparability issue with evaluating progress against the original target.

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Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Percentage of schools using at least half of their school grant	Text	0%	50%	100%	74% (2018 SIP and SG evaluation)
allocation for the SIP teaching and learning domain		17-Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

Original target was achieved at completion. Significant progress was made towards the formally revised end-of-project target that was partially achieved.

Objective/Outcome: Strengthening of institutions at different levels of educational administration.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Increased MoE capacity for evidence-based decision making as reflected in reduction in dropout rate in Grade 1	Percentage	25.00 17-Oct-2013	20.00 17-Oct-2013	17.00 12-Oct-2017	25.00 31-Dec-2019

Comments (achievements against targets):

Formally revised end-of-project target was not achieved (due to increased conflict/violence in the country). Original target was not met at completion as it had been surpassed and a more ambitious target set at the time of restructuring. Still, several cohorts benefited from reduction in dropouts.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Increased MoE capacity for evidence-based decision	Text	0%	25% to level 2 and	10% of Level 1 schools move to Level 2; 5% of	57.5 % of level 1 schools move to level

(Ethiopia General Education Quality Im	provement Project II (P129828)			
	making as reflected in	25	5% to level 3	Level 2 schools move	2 or level 3; and 8.5%

moved up to Grade 2 and 3 respectively on 21,363 schools re- inspected in 2016/17 and 2017/18		17-Oct-2013	17-Oct-2013	to Level 3	inspected in 2016/17
		17-Oct-2013	17-Oct-2013	12-Oct-2017	31-Dec-2019

Original target was revised at Project's restructuring as too many schools were reported to be level 1 and level 2 according to the inspection standards. The original target was partially achieved and the formally revised end-of-project target was achieved at completion.

A.2 Intermediate Results Indicators

Component: Curriculum, implementation and teaching learning materials

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
No of textbooks and supplementary materials	Number (Thousand)	0.00	130000.00	120000.00	125886.65
distributed to O class - Grade 12 (cumulative)		17-Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

Comments (achievements against targets):

Revised end-of-project target is achieved.

Component: Teachers and education leaders development program

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of post-graduate diploma in school leadership graduates (annual)	Number	0.00 17-Oct-2013	60.00 17-Oct-2013	800.00 28-Dec-2018	1456.00 31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the percentage of school directors who have completed the new leadership program (60%) were revised (restructurings of July 2017 and December 2018). Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of diploma graduates from Colleges of Teacher Education (annual)	Text	primary - 55.6%; first cycle of secondary - 90.7%	primary - 90%; first cycle of secondary - 100%	10,000.00	13,833.00
		17-Oct-2013	17-Oct-2013	28-Dec-2018	31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the percentage of teachers with appropriate qualifications were revised (restructurings of July 2017 and December 2018). Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of post-graduate	Number	90.70	100.00	1500.00	3338.00

diploma in teaching regular graduates from universities (annual)	17-Oct-2013	17-Oct-2013	28-Dec-2018	31-Dec-2019	
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Original indicator and target on the percentage of teachers with appropriate qualifications (100% for the first cycle of secondary) were revised (restructurings of July 2017 and December 2018). Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of primary teachers upgraded from certificate to diploma (annual)	Number	55.60 17-Oct-2013	90.00 17-Oct-2013	22000.00 28-Dec-2018	30949.00 31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the percentage of teachers with appropriate qualifications (90% for primary) were revised (restructurings of July 2017 and December 2018). Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of teachers upgraded from diploma to post-graduate diploma in teaching in summer	Number	90.70 17-Oct-2013	100.00 17-Oct-2013	13000.00 28-Dec-2018	18347.00 31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the percentage of teachers with appropriate qualifications (100% for the first cycle of secondary) were revised (restructurings of July 2017 and December 2018). Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of teachers who received ELTIP training (cumulative)	Number	55.60 17-Oct-2013	90.00 17-Oct-2013	10000.00 28-Dec-2018	71052.00 31-Dec-2019

Original indicator and target on the percentage of teachers with appropriate qualifications (90% for primary) were revised (restructurings of July 2017 and December 2018). Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of G7-8 teachers who received maths and science updating training (cumulative)	Number	55.60 17-Oct-2013	90.00 17-Oct-2013	20000.00 28-Dec-2018	26761.00 31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the percentage of teachers with appropriate qualifications (90% for primary) were revised (restructurings of July 2017 and December 2018). Revised end-of-project target is surpassed.

Component: School improvement program

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Percentage of schools receiving	Percentage	0.00	80.00		32.00

school grants by October 31 of each year. 17-Oct-2013 17-Oct-2013 31-Dec-2019	
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End-of-project target is not achieved.

Component: System management and capacity building program

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Dissemination of Education Statistics Annual Abstract by early October following the school year. Binary outcome: 1 if delivered; 0 otherwise.	Number	0.00 17-Oct-2013	1.00 17-Oct-2017		1.00 31-Dec-2019

Comments (achievements against targets):

End-of-project target is achieved.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of national learning assessment items banked for grades 4, 8, 10 and 12 with acceptable psychometric characteristics.	Text	0	800 (Grade 4 & 8) 1000 (Grade 10 & 12) NLA items banked		1,800 (Grade 4 & 8): 3,360 (Grade 10 & 12) NLA items developed and banked
characteristics.		17-Oct-2013	17-Oct-2013		31-Dec-2019

End-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of primary and secondary teachers who took written licensing exam.	Number	0.00 17-Oct-2013	100.00 17-Oct-2013	200000.00 12-Jul-2017	404160.00 31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the percentage of REBs with established teacher licensing structure (100%) were revised at MTR (restructuring/AF project paper of July 2017). Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Percentage of schools	Number	0.00	100.00	95.00	95.00
inspected.		17-Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the percentage of primary and secondary schools inspected each year (100%) were revised at MTR (restructuring/AF project paper of July 2017). Revised end-of-project target is achieved.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Percentage of Level 1 and Level 2 schools re-inspected.	Text	0% of primary and secondary schools	100% of primary and secondary schools	16,033	21,365 schools re- inspected (6,159 Level

				1 and 15,206 Level 2 schools in 2017/18)
	17-Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

Original indicator and target on the percentage of primary and secondary schools inspected each year (100%) were revised at MTR (restructuring/AF project paper of July 2017). Revised end-of-project target is surpassed.

Component: Information and Communication Technology (ICT) in education

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Procurement and delivery of E- cloud infrastructure. Binary: 1 if delivered; 0 otherwise.	Number	0.00 17-Oct-2013	300.00 17-Oct-2013	1.00 12-Jul-2017	1.00 31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the number of schools and universities that have a new computer laboratory installed and operational for access to private cloud infrastructure in MCIT national data center (300) were revised at MTR (restructuring/AF project paper of July 2017). Revised end-of-project target is met. The closing of contract is still pending due to a dispute between the MoE and the supplier on a tax issue. This has delayed the disbursement of the remaining 20% payment to the supplier.

Component: Program planning and coordination, monitoring and evaluation, and communication

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Planning and Resource	Number	0.00	1.00		0.00

Mobilization Directorate produces consolidated annual GEQIP work plan by mid-May each year. Binary 1 if delivered; 0 if otherwise.	17-Oct-2013	17-Oct-2013		31-Dec-2019
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End-of-project target is not achieved.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Submission of consolidated semi-annual report (March) and annual report (Sept) of GEQIP2. Binary 1 if delivered; 0 if otherwise.	Number	0.00 17-Oct-2013	1.00 17-Oct-2013		1.00 31-Dec-2019

Comments (achievements against targets):

End-of-project target is achieved.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Production of final reports from the proposed specialized evaluations (two school grants evaluations, textbooks survey, comprehensive beneficiaries survey) evaluations	Text	0	5	4 [2 SGs evaluations, textbook unannounced survey and comprehensive evaluation including beneficiaries survey at	4 [2 SG evaluations (2016 and 2018); textbook survey (2018); and comprehensive evaluation (2019)]

undertaken.				exit]	
	17-0	Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

Revised end-of-project target is achieved.

Unlinked Indicators

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Direct beneficiaries	Number	0.00	21650000.00	23650000.00	24976545.00
		17-Oct-2013	17-Oct-2013	28-Dec-2018	31-Dec-2019

Comments (achievements against targets):

Revised end-of-project target is surpassed.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Female beneficiaries	Number	0.00	48.70	48.70	47.00
		17-Oct-2013	17-Oct-2013	12-Jul-2017	31-Dec-2019

Comments (achievements against targets):

Original indicator and target on the number of female beneficiaries (10,540,000.00) were revised at MTR (restructuring/AF project paper of July 2017) to the percentage of female beneficiaries. Revised end-of-project target is not achieved.

B. KEY OUTPUTS BY COMPONENT

- Component 1: Curriculum Implementation and Teaching Learning Materials. Building on the successes
 in curriculum development and textbook provision achieved in GEQIP I, this component focused on
 improvement of the quality and relevance of the curriculum and increased supply of textbooks and related
 instructional materials, devolving the procurement of textbook reprinting and distribution services to the
 regions.
- 2. The objective of the subcomponent 1.1: Curriculum Implementation was to enhance the quality of the primary and secondary curriculum by strengthening the institutional capacity of regional educational bureaus through (i) assessment of the impact of the National Curriculum Framework 2010 (NCF 2010); (ii) translation, printing and distribution of curriculum materials to the regions; (iii) focused curriculum studies and study visits; and (iv) realignment of the general education curriculum with TVET and higher education curriculum. The project supported the rollout of the National Curriculum Framework of 2010 (NCF 2010). First, 280,000 copies of the curriculum framework, textbooks policy, and science and mathematics strategy were printed in seven mother tongue languages and distributed to the regions. Second, O-Class curriculum materials (teaching guide and resource books) were translated to 42 local languages and distributed to regional education bureaus. Third, a formative evaluation of curriculum implementation, conducted in December 2016, provided information for further curriculum development and teacher development efforts.
- 3. Subcomponent 1.2: Teaching and Learning Materials financed the reprinting of textbooks, estimated on the basis of enrollment growth and an allowance to replace books damaged or lost. In addition to reprinting the textbooks, the project provided textbooks and teacher guides in the mother tongue, teacher guides in visual arts, music, and physical education, and books in Braille books for the visually impaired. About 126 million textbooks, teaching guides, and supplementary materials (against the target of 120 million copies) were distributed to regions and woredas for further distribution to schools. An additional 52 million copies of Grade 1-8 English textbooks were to be distributed by December 31, 2019. The majority of textbooks were delivered, however, not fully. At the time of preparation of this ICR, US\$8 million remained undisbursed for textbook and ICT contracts (due to unresolved disputes over taxes and documentation and/or delivery of textbooks). In addition to maintaining the supply of textbooks to schools through reprints, the project supported provision of textbooks in seven mother tongues, and braille books for the sight impaired to promote equity; and supplementary materials in mother tongue, mathematics and science to reinforce knowledge and skills learned in class. Out of the delivered textbooks, 26.7 million copies are primary mother tongue textbooks. The 2018 textbooks survey confirmed that the ratio of primary school students to newly procured mother tongue textbooks increased to 1:0.74. While there are variations across schools (shortages in hard-to-reach schools), overall the national average is close to the target of 1:1.
- 4. In terms of textbooks utilization, the 2019 exit evaluation reported the following results: 51.7 percent of the students brought their math textbooks; 60.95 percent their environmental science; and 56.56 percent their social studies textbooks as compared to 31 percent reported in the 2018 textbook survey. The main reasons identified in the 2018 survey were: the bulkiness of the books; long walking distance from school; fear of theft/ damage; and lack of bags to carry textbooks. MoE recognized this as a major issue and



communicated the findings to the regional education bureau to take actions to improve utilization of textbooks.

5. The international competitive procurement process has reduced the average price for reprinting primary and secondary textbooks from US\$0.68 in GEQIP I to US\$0.52 in GEQIP II resulting in substantial savings. This has helped MoE to procure textbooks in excess of its original plans. Table 8 shows status of the provision of teaching and learning materials as of December 2019.

Table 8. Status of provision of teaching and learning materials as of December 2019

TLMs	Cost	Quantity
Montessori materials for 'O' class in Benshangul-Gumuz	132,211	30,940
Montessori materials for "O" class in Gambella	90,909	13,600
Grades 1-4 supplementary mother tongue books	4,585,015	24,753,052
Grades 1-4 supplementary math and science books	2,436,436	6,400,640
Grades 1-8 textbooks reprints	14,022,579	30,109,160
Grades 1-8 mother tongue	16,758,326	26,670,520
Grades 1-8 adapted mother tongue	3,373,375	5,219,141
Grades 1-8 art and physical education; Grades 5-8 music, art, PE teaching	724,527	653,323
guides		
Grades 3-8 Amharic as a second language	4,082,723	7,675,794
Grades 5-8 Amharic as second language for Oromiya	3,026,364	3,000,000
Grades 7-8 Biology	5,132	2,560
Grades 7-10 supplementary materials math and science	5,469,810	13,713,600
Grades 9-12 textbooks reprints	5,087,640	6,891,323
Grades 9-12 Tigrigna mother tongue	1,320,667	509,548
Grades 9-12 Somali mother tongue	1,339,936	84,952
Grades 9-12 Braille textbooks	4,756,145	27,500
Grades 9-12 physical education teaching guide	67,361	131,000
Grades 1-8 English	52,188,456 ⁴¹	52,188,456

- 6. Key lessons. First, MoE needs to put in place a strong procurement and contract administration system, with qualified and competent staff and with better decision-making to improve the efficiency of the procurement of textbooks. Second, MoE and regional education bureaus need to improve the textbook distribution system, including establishing on-line distribution and inventory management system, to ensure textbooks reach schools at the beginning of school year. Third, school leaders and teachers have a critical role in ensuring textbooks are effectively utilized in classrooms.
- 7. Component 2: Teachers and Education Leaders' Development Program. This component supported university/CTE based leadership training for school leaders; pre-service teacher development program; and in-service teacher development program. It directly relates to the PDO indicator 2 of improving

⁴¹ At the time of preparation of this ICR, about US\$8 million remained undisbursed for textbook and ICT contracts (due to unresolved disputes over taxes and documentation and/or delivery of textbooks).

teacher effectiveness, which is measured using an index of average scores of inspection standards on teachers' knowledge, lesson planning, teaching practice, and assessment practice. School reinspection results in 2016/17 and 2017/18 showed slight improvement in the teacher effectiveness index. In addition, progress was made in the implementation of major activities under the different subcomponents. As of December 2019, all of the intermediate indicators related to Component 2 have been met or exceeded.

- 8. Subcomponent 2.1. Leadership Program (university/college based) supported college of teacher education (CTE) or university-based leadership training program (i.e. Post Graduate Diploma in School Leadership (PGDSL) program). PGDSL is a key modality used by the MoE to build the capacity of principals and supervisors. 4,168 school leaders completed post-graduate diploma in school leadership during the project period exceeding the project target of 800 by Dec 2018 on leadership training.
- 9. Subcomponent 2.2. Teacher Development Program supported improvements in learning conditions in both primary and secondary schools by advancing the quality of teaching in general education through pre-service and in-service teacher training, and continuous professional development. Pre-service teacher development program improved teacher training by: (i) improving the selection of teacher training entrants and strengthening teacher education programs, including pre-service student teaching experience (practicum); (ii) strengthening English Language Improvement Centers (ELICs); (iii) providing professional development for teacher educators; and (iv) establishing centers of excellence in Teacher Education. The Project supported the selection of teacher training entrants as well as development teacher training programs.
- 10. In order to improve the effectiveness of ELICs, capacity building training was provided to ELIC coordinators. However, the centers were not staffed with qualified staff and not institutionalized which could affect their sustainability. Professional development of teacher educators through higher diploma program (HDP): (i) to become reflective teachers; (ii) to improve their pedagogical skills; and (iii) to understand the school learning environment and manage learning activities effectively. In total 4,216 CTEs staff and 2,109 university staff were trained in the HDP. During HDP they were placed in primary and secondary schools for practical engagement. At the end of HDP, they presented their action research project. Centers of Excellence (COE). Five universities (Addis Ababa, Bahirdar, Hawassa, Jimma, and Mekele) were selected as centers of excellence for teacher training. Each university was tasked to design and develop teacher training curriculum and modules for each levels of education.
- 11. The objective of the in-service teacher training subcomponent was to improve the qualifications of inservice teachers through: (i) teacher upgrading, specifically to support some of the costs of upgrading from certificate to diploma for primary teachers and Alternative Basic Education facilitators; and accelerated teacher training in the emerging regions; (ii) short-updating trainings for English, mother tongue, and math and science teachers. For example, 125,769 in-service primary teachers were upgraded from certificate to diploma, and 59,051 secondary teachers from bachelor degree (in non-teaching fields) to PGDT, exceeding the planned targets (table 9).

4,521

40,261

from bachelor's degree

to PGDT

Total

Table 9. Progress towards improving teachers' qualification under GEQIP-II								
Graduates								Revised end-of- project target
	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	Total	(annual)
Diploma graduates from CTEs	9,793	13,223	14,340	20,444	25,509	13,833	97,142	10,000
Teachers upgraded from certificate to								
diploma	22,808	31,285	16,727	24,000	30,949	n/a	125,769	22,000
PGDT regular graduates from universities	3,139	2,065	2.700	5,664	16,753	3,338	33,659	1,500
Teachers upgraded	3,133	2,003	2,700	3,004	10,733	3,338	33,033	1,300

12. PTA members' views on SG planning, transparency and utilization and school improvement planning as a result of 2018 SG evaluation showed that:

9,921

43,688

16,735

66,843

18,347

91,558

n/a

17,171

59,051

315,621

- 92.5 percent of schools plan the School Grant budget jointly with the SIP committee and wider school community members and stakeholders;
- 81.1 percent of schools have a SIP plan aligned with the School Grant allocations;

9,527

56,100

- 90.4 percent of schools have SIP committee preparing annual report on results of the implementation of SIP;
- 78.8 percent of schools had their SIP committee's report discussed publicly at school with the school community and other stakeholders;
- At the same time, only 38.5 percent of schools posted their SG allocations at the public notice board. PTA members' reported that:
- School Grant resources are allocated transparently with participation of internal and external stakeholders (92.3 percent of PTA members agree or strongly agree);
- School Grant program empowers schools to make informed financial decisions based on actual needs in schools (92.4 percent agree or strongly agree);
- SIP practices increase participation of school community in the decision-making process about school matters (94.3 percent agree or strongly agree);
- SG program helps improve the learning conditions in schools (98.1 percent agree or strongly agree);
- SG program helps build separate toilet (for boys and girls) in the school (80.8 percent agree or strongly agree);
- The vast majority of respondents also acknowledged that SG program helped enrich library in their school and purchase key necessities such as chalk and paper.
- 13. The revision of the School Improvement Framework and Guidelines was made by the MoE to meet the needs of isolated schools and small schools, including ABEs, usually located in rural and disadvantaged areas. Delivering quality education in emerging regions poses a challenge due to higher number of level

13,000

46,500

one schools⁴², low quality teaching and learning environments, high drop-out rates and retention problems as well as a higher number of pastoralist communities which require additional interventions. Therefore, additional school grants were allocated to small isolated schools and ABEs, to emerging regions as well as to support the education of O-class student⁴³ and children with disabilities. Communications campaigns were organized at the community level to raise stakeholder awareness and accountability for SIP and school grants. A training module in video and print concerning evidence-based decision making and planning were developed and disseminated, incorporating the examples and best practices in school improvement.

- 14. Component 4: System Management and Capacity Building Program. This component supported management and capacity building aspect of the project by: (i) strengthening the EMIS by improving data collection processes, data quality, and utilization of system data for evidence-based planning, policy making, management, and evaluation; (ii) strengthening the quality assurance systems, including assessment and examinations; teacher licensing; school inspection; and capacity development at school, woreda, region and federal levels; and special support for the four emerging regions.
- 15. **Under Subcomponent 4.1. EMIS,** the intermediate indicator concerning the ESAA published by October 2019 was met. This is a large improvement over the past years, with information available to the MoE to properly plan activities and monitor sector developments.
- 16. **Subcomponent 4.2. Quality assurance systems.** The subcomponent National learning assessment (NLA) and examinations focused on development of a more robust national learning assessment and examinations system aligned with the national curriculum. To this end, the subcomponent supported (i) the development and banking of calibrated test items for grades 4, 8, 10 and 12 NLA tests and for grade 10 examination; (ii) undertake NLA for Grades 4, 8, 10 and 12 as well as Early Grade Reading Assessment (EGRA); and (iii) training to enhance regional capacity in test development and administration for Grade 8 examination. One of the intermediate indicators of this subcomponent was to develop 1,800 national learning assessment items banked for Grades 4, 8, 10 and 12 in five subjects with acceptable psychometric characteristics. As of December 2019, the National Education Assessment and Examination Agency developed and validated 5,160 NLA items, and 15, 220 for G10 national examination. These items were added using the Item Bank Management Software (IBMP) procured under the project.
- 17. Grade 4 and 8 NLA. Grade 4 NLA in four subjects (mathematics, mother-tongue reading, environmental sciences and English) and Grade 8 NLA in five subjects (mathematics, biology, physics, chemistry and English) were conducted in May 2019. However, the results of the assessment are yet to be released to report on recent developments. However, if we compare the 2011 results with the 2015 results showed

⁴² If a school scores below 50 percent on inspection standards, it is classified as level 1; if a school scores between 50 percent-69.99 percent, it is classified as level 2; if a school scores between 70 percent-89.99 percent, it is classified as level 3; and if a school scores between 90 percent-100 percent, it is a level 4 school.

⁴³ Several studies in Ethiopia show that attendance in preprimary is a significant factor for learning progress, school attendance and promotion, and helps reduce dropout and repetition rates—chronical issues the education system currently faces. In Ethiopia, children who had been to preschool had progressed further through primary school by 0.218 of a grade, on average, than those who had not. Also, when considering student background and household characteristics (such as reading books at home, having three meals a day, etc.), attending preschool is an important factor for learning progress in reading. Children who attend preschool tend to have better cognitive skills later in life than non-preschool peers: 8-year-olds who have attended pre-school scored 43.7 percent higher in vocabulary tests and 51.1 percent higher in the cognitive test than those who did not attend ECE services. Urban preschool children are 25.7 percent likely to complete secondary education than their non-preschool counterparts at the proper age. Source: Woldehanna, T. and Araya, M. (2017) Early Investment in Preschool and Completion of Secondary Education in Ethiopia: Lessons from Young Lives, Working Paper 168, Oxford: Young Lives.

that for Grade 4 there is a small gain in mathematics performance; achievement in reading and environmental sciences did not improve; and in English it declined markedly. For Grade 8, there were significant improvements across five subjects from 2011 to 2015. On average, there is an increase of 10 points in each subject, including 22 points increase in physics. Item Response Theory (IRT) was applied to ensure the comparability of test scores between 2011 and 2015.

- 18. EGRA. There has been little change in overall reading performance at the aggregated national level across the three EGRA administrations in seven languages Afan Oromo, Aff Somali, Amharic, Hadiyissa, Sidamu Afoo, Wolayttatto and Tigrigna in five regions. Looking at the top two benchmark levels combined (fluency and with increasing fluency), the percentage of students in grades 2 and 3 combined, who exhibit relatively functional reading proficiency was 31.3 percent in 2014. This increased slightly to 34.3 percent in 2016 and then slipped back to 32.4 percent in 2018.
- 19. The Project also supported capacity building for regional examination including for improved development and administration of Grade 8 regional examination. National Education Assessment and Examinations Agency (NEAEA) provided training for regional assessment and examination experts on conceptual overview of assessment, test development, test analysis and data capturing; and for Grade 8 test developers and exam administration focal persons on how to write, review and edit examination items based on the national curriculum framework.
- 20. Adaptation of Measuring Early Learning Quality and Outcomes (MELQO) tool to six local languages (Amharic, Af Somali, Sidamu afoo, Oromifa, Tigrigna and Bertegna) was completed and this tool was piloted in February 2018. The findings of the piloting were reported together with the ELP systems research in June 2018. The findings concluded that the tool is valid and reliable for application in these languages in Ethiopia, yet some of the items need some fine-tuning prior to nation-wide administration of this assessment.
- 21. **Teacher licensing** subcomponent aimed to regulate the professional development of teachers and school leaders; to promote excellence in the teaching profession and in school leadership and management; to identify capacity gaps of teachers and school leaders and provide feedback. Activities under this subcomponent included: (i) testing development and assessment of new and existing teachers; (ii) portfolio assessment of existing teachers to assess their performance; (iii) creating accreditation standards for TEIs; and (iv) creating a teacher Licensing Information System for collecting, managing and analyzing licensing data. The Licensing and Re-licensing Directorate developed written exam and portfolio assessment tools for assessing teachers and school leaders. More than 404,160 teachers (307,764 primary and 96,396 secondary teachers), and 14,257 school leaders (11,776 primary and 2,481 secondary) took the written licensing exam. Out of the total number of teachers and school leaders who took the exam, 35 percent were female. Overall, the progress exceeded the target. Out of the total examinees, 24 percent (101,596) qualified for portfolio assessment. Of this, 31,000 received licensing certificates, while the remaining are under assessment. One of the key challenges is the lack of incentives for teachers and school leaders to undergo licensing tests since there is no link between the licensing results and their career development.
- 22. **School inspection** subcomponent aimed to support and strengthen school inspection systems centrally and locally to ensure that schools were inspected on a regular basis. Inspection was identified as a

powerful quality assurance tool to promote school improvement and ultimately student outcomes. Since the beginning of GEQIP II, the MoE and REBs undertook a large number of inspections. Specifically, between 2013/14 and 2015/16, 95 percent of all schools (34,126) were externally inspected meeting the intermediate indicator on this sub-component. The results of inspection revealed that 25.6 percent and 64.1 percent of schools were Level 1 and 2 which were below the standard. In addition, the directorate conducted re-inspections of Level 1 and Level 2 schools in 2016/17 and 2017/18 exceeded the planned target for re-inspections. The results of the 2016/17 and 2017/18 re-inspection of 21,363 schools showed that 57.5 percent and 8.5 percent of Level 1 and 2 schools were upgraded and moved up to the next level respectively. One of the issues in the inspection system was delay in data collection from woredas to REBs and then to the MoE. As school inspection is one of the QA mechanisms, data collection and analytical capacity of regions and MoE needs to be strengthened, and the results of inspection and re-inspection should be used for planning and decision making at all levels, particularly by schools.

- 23. **Under subcomponent 4.3. Capacity Building** the project supported capacity development activities for experts at the MoE, REB, Woreda Education Office level, as well as school leaders, through short-term training. In this regard, 5,129 (11 percent female) woreda education officials and experts drawn from 1,018 woredas received ten-days short-term training on educational planning; monitoring and evaluation; data collection, analysis and utilization; educational leadership; educational supervision; women participation in education; community participation; and resource mobilization. To provide increased support to emerging regions, 24 consultants hired by the project continued their support in Afar, Benishangul Gumuz, Gambella, and Eth. Somali regions. Main areas of training and support were on school inspection; school improvement plan; data collection and analysis.
- 24. There has been some improvement over the last year in the dissemination of education statistics annual abstract and school re-inspection results. MoE need to make an increased effort to fully analyze the rich data sets, timely disseminate and ensure utilization of the findings for planning and decision making.
- 25. **Component 5: ICT in Education**. This component aimed to build ICT infrastructure and skills within the education sector by: (i) demonstrating the improvement in learning conditions, the learning experience and learning outcomes through the appropriate integration of ICT for an Ethiopian schooling context; (ii) supporting the development of a policy framework that will guide all ICT in general education initiatives by establishing a national institution; (iii) establishing a national ICT infrastructure improvement plan for general education; and (iv) strengthening teacher professional development in ICT. Development of ICT infrastructure needs to be supported by relevant content to support the teaching and learning process. During the MTR, because of limited progress, the component was simplified to three sub-components.
- 26. Subcomponent 5.1. Capacity building for the Centre for Educational ICT. The Centre for Educational ICT was to become an autonomous agency to coordinate ICT in education related programs. Towards this end, CEICT planned to hire consultancy services to get technical support. However, CEICT was only able to hire a consultant to develop an ICT policy. Efforts to hire consultants for capacity building for CEICT, for developing the center as an autonomous agency, and for preparing ICT-competency framework for teachers were not successful.
- 27. **Subcomponent 5.2. Provision of E-cloud infrastructure** aimed to install an e-cloud infrastructure (involving a server connected to 80 terminals) in 300 secondary schools and 10 universities to provide ICT-

enabled quality learning. This implied two computer labs with 40 stations in each school to be used for personalized learning and teaching in a classroom setting. After a long delay, the facilities were installed in all schools and universities. As part of the infrastructure rollout, capacity building was provided for MoE, REBs and school technicians. At the time of preparation of the ICR, the closing of the contract is still pending due to the dispute between the MoE and the supplier on tax related issues. This has delayed the handover and completion of the service and the disbursement of the remaining 20 percent of payment to the supplier. MoE also procured 480 tablets and 90 mobile phones with educational application and resources for 12 secondary schools in emerging regions for students use in classrooms and school premises. Due to ICT infrastructure procurement delays, there was no time for content development.

- 28. Subcomponent 5.3. E-learning system development (LMS). CEICT conducted a baseline of ICT in education knowledge and capacity in 310 participating secondary schools and universities. The survey provided essential information on the knowledge, capacity and practices related to ICT use of participating schools and universities which are useful to set targets for improving capacity and practices and introduce relevant ICT-based content in future. Efforts to hire a consultant to design and implement Learning Management System for schools that offers online instruction were not successful. Instead, the Center collected digital video contents from on-line resources and customized them in line with existing curriculum, and digitized plasma education videos, both hosted on the local server of schools for access by students and teachers.
- 29. Component 6 Program Planning, Coordination, Monitoring and Evaluation and Communications. The main purpose of this component was to strengthen all aspects of program coordination, monitoring and evaluation. The Closing Date was extended for one and half year to complete the remaining activities, particularly procurement of textbooks and ICT infrastructure.
- 30. **Subcomponent 6.1. Program Planning and Coordination**. This subcomponent aimed at strengthening coordination capacities at the federal level, and between federal, regional, and woreda levels by providing technical support; and capacity building to strengthen links between MoE and MoFEC and between decentralized levels of education and finance offices. Over the last two years, the project staff both at federal and regional level was responsible for implementation, monitoring and reporting of both GEQIP II and the successor program, GEQIP-E. Partially due to weak procurement capacity, the Closing Date was extended for one and half year (from July to December 2018, from Jan to June 2019, and from July to December 2019) to complete pending project activities, particularly the procurement of grade 1-8 English textbooks and ICT infrastructure.
- 31. **Subcomponent 6.2. Monitoring and Evaluation.** The MoE improved its reporting using the results framework. Three external evaluations were planned under the project. The first is a comprehensive evaluation, focusing on the impacts of GEQIP II on improving learning conditions and system strengthening. The comprehensive evaluation was initially planned to be conducted in two points in time: at mid-term (June 2017) and at project closing (December 2018). The mid-term revaluation did not materialize because of procurement delays. For the exit evaluation, the MoE hired a consultant which did the study in March 2019. Second, MoE also hired a consultant which undertook an evaluation of textbooks availability and utilisation at mid-term (2016) and prior to original Closing Date (2018; under support of the World Bank).

32. **Subcomponent 6.3. Communications.** The objective of this subcomponent was to create awareness raising, advocacy and public dialogue on quality improvement. The communication team good practices and success stories of GEQIP II interventions through mass media, including radio and TV programs. Results generated by GEQIP II (on school inspections, student assessment, EMIS, SIP/SG, and textbooks etc.) should continue to be disseminated.

ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS	
Name	Role
Preparation	
Thanh Thi Mai	Task Team Leader(s)
Tesfaye Ayele	Procurement Specialist(s)
Meron Tadesse Techane	Financial Management Specialist
Chukwudi H. Okafor	Social Specialist
Desta Solomon	Social Specialist
Asferachew Abate Abebe	Social Specialist
Supervision/ICR	
Hiroshi Saeki, Girma Woldetsadik	Task Team Leader(s)
Shimelis Woldehawariat Badisso, Pascal Tegwa, Rahmoune Essalhi	Procurement Specialist(s)
Meron Tadesse Techane	Financial Management Specialist
Yacob Wondimkun Endaylalu	Environmental Specialist
Tihtina Zenebe Gebre	Team Member
Samuel Lule Demsash	Social Specialist
Janice Heejin Kim	Team Member
Moges Woyessa Bowuso	Social Specialist
Saori Imaizumi	Team Member
Andrew William Reid	Team Member
Anna Olefir	Team Member
Tesfaye Ayele	Procurement Team
Desta Wolde Woldearegay	Procurement Team
Chukwudi H. Okafor	Social Specialist

Eleni Albejo	Procurement Team
Alfonso F. de Guzman	Team Member
Biftu Wordofa	Procurement Team
Messeret Marcos	Procurement Team
Tawhid Nawaz	Team Member

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost			
Stage of Project Cycle	No. of staff weeks	US\$ (including travel and consultant costs)		
Preparation				
FY13	17.215	116,348.55		
FY14	20.655	172,901.79		
FY18	0	119.63		
Total	37.87	289,369.97		
Supervision/ICR				
FY14	7.280	126,300.93		
FY15	100.196	635,252.72		
FY16	102.692	921,799.07		
FY17	93.195	929,138.78		
FY18	100.828	890,708.11		
FY19	29.194	266,263.86		
FY20	19.250	59,674.47		
Total	452.64	3,829,137.94		

ANNEX 3. PROJECT COST BY COMPONENT

Components	Amount at Approval ⁴⁴ (US\$M)	Actual at Project Closing (US\$M)	Percentage of Approval, %
Curriculum implementation and teaching learning materials	114.4	103.7	90.6
Teachers and education leaders development			
program	70.0	105.3	150.4
School improvement program	255.0	257.9	101.1
System Management and capacity building program	21.7	21.5	99.1
Information and communication technology			
(ICT)	34.7	21.2	61.1
Program planning, coordination, monitoring and evaluation and			
communications	24.5	7.6	31.0
Total	520.3	517.2	99.4
Contingencies	19.7	-	-
Total	550.0	517.2	94.0

 $^{^{\}rm 44}$ GEQIP-II PAD (p. 14).

ANNEX 4. EFFICIENCY ANALYSIS

1. **Development impact.** Components 1, 2 and 3 financed learning materials, teacher training and school improvement, respectively. These activities improved learning outcomes and, subsequently, human capital and future productivity. The economic analysis in the PAD estimated the required effect of the project on cognitive skills in order to justify the project. These range from 0.008 standard deviations to 0.074, depending on the assumptions of the model. While it is not possible to measure the causal effect of these interventions, analysis of the 2015 NLA found a positive association between indicators of these activities and learning outcomes. Based on this association as well as progress in utilizing textbooks, training unqualified teachers, and increasing school rating levels, the effect of these interventions on cognitive skills was modeled as 0.22 standard deviations (see methodology described below). The modeled effect on future earnings resulted in an internal rate of return of 13.48 percent; a sensitivity analysis based on the standard error of the modeled effect size suggests that an internal rate of return of less than 10.7 percent is unlikely (having a probability of less than 5 percent). Finally, the project's annual recurrent costs are estimated to represent approximately 2.7 percent of total annual education expenditure and 4.2 percent of its recurrent expenditure. While this amount is non-trivial, the project has already been succeeded by GEQIP-E to provide additional support to the government.

Effectiveness of the interventions: learning outcomes

- 2. International evidence. A large body of research has examined the effectiveness of learning materials, teacher training and school grant programs which Components 1-3 support (e.g.: reviews by Gainamen & Murnane 2016; Popova, Evans and Arancibia 2016, Todd 2010; Fuller and Clark 1994; Bruns et al. 2011; World Bank 2007). For all three types of interventions, effects are mixed and depend on a variety of factors reflecting context and intervention design. For example, the effectiveness of textbooks depends on their difficulty relative to students (Glewwe et al. 2009) and on their use in schools (Sabarwal, Evans, & Marshak 2014). Evidence from randomized-controlled trials suggests that the effectiveness of in-service teacher training may depend on the extent to which training focuses on teaching techniques versus subject knowledge (Popova, Evans & Arancibia 2016). The effectiveness of decentralized decision-making including school grants often depends on the strength of parent and community participation (Galiani, Gertler & Schargrodsky 2008). In developing country contexts, for example, grant planning must be suited to local literacy and capacity of community members and parents (e.g.: Blimpo, Evans & Lahire 2015), learning results of children need to be properly socialized among parents and community members (Bruns et al. 2011:71), and planning meetings need to be participatory not dominated by school principals or other local elites (Parker 2005). As a result, the international evidence on inputs suggests that effectiveness is not guaranteed, but depends on wide array of factors and requires rigorous evaluation.
- 3. **NLA 2015 findings.** The background questionnaires for the 2015 National Learning Assessment (NLA) were modified to help estimate the association between the outputs from Components 1-3 of GEQIP II. One indicator for each of the three components was constructed based on this data to most closely match the results of each component presented in the results framework: (i) a measure of the utilization of textbooks defined as whether a student's teacher reported that his or her class has a 1:1 textbook student ratio and uses the textbook in 100 percent of classes; (ii) whether the student's

teacher has a diploma compared to a lower qualification; and (iii) whether the student's school was a level 1, 2 or 3 school under the school improvement program. These three indicators most closely reflect Components 1, 2 and 3, respectively. Linear regression models were estimated for each subject and grade to estimate the association between these indicators and learning outcomes (Table 10). A positive association between textbook utilization and achievement was found for 4th grade reading and English and 8th grade mathematics. Students with teachers with a diploma were found to have statistically higher learning outcomes than those with teachers with a lower qualification in several subjects in 4th grade and one subject in 8th grade, and a statistically lower association was found for one 8th grade subject. Level 2 schools were found to have statistically higher learning outcomes than Level 1 schools for all 8th grade subjects. Level 3 schools were found to have statistically higher learning outcomes than Level 2 schools in two of the 8th grade subjects.

Cost-benefit analysis

- 4. Modeled benefits. The economic analysis in the PAD identified a range of effect sizes of Components 1 to 3 on cognitive skills in order to justify the investment. To model this effect size, the achievements of the Project under these three components are translated into effects on cognitive skills based on how they associate with learning achievement in the NLA. For each component, an indicator of progress from the results framework which most closely matches its indicator in the NLA was defined (Table 10). For Component 1, the increase in the percent of students bringing their textbooks to class was used as a proxy for textbook utilization; its effect size was modeled as the association (in standard deviations) between the indicator of textbook utilization and learning achievement presented in Table 11. For Component 2, the percent of teachers financed by GEQIP II that received pre-service training or in-service training to reach a diploma qualification was used; its modeled effect size was the increase in learning achievement associated with a student's teacher having a diploma versus a lower qualification. For Component 3, the percent of schools that increased from Level 1 to Level 2 and from Level 2 to Level 3 was used; their effect sizes were the differences in learning achievement associated with being in a Level 2 versus a Level 1 school or a level 3 versus a Level 2 school, respectively. For example, 57.5 percent of Level 1 schools increased to Level 2. The difference in learning achievement between Level 2 and Level 1 schools was for 8th grade English was 0.299 standard deviations. The resulting effect is the product, 57.5 percent times the percent of 8th grade students in level 1 schools times 0.299 standard deviations. A composite effect for each grade was the sum of each component's effect averaged for language subjects, mathematics and science subjects.
- 5. To simplify the analysis, only children who completed primary school were assumed to benefit from the components, and the completion rate was assumed to be 62.1 percent using the 2018/19 completion rate reported in the Statistical Abstract. The effect on their cognitive skills was the sum of the composite effects for each grade; this total effect was estimated to be 0.215 standard deviations with a standard error of 0.053. The effect of cognitive skills on earnings in Ethiopia has not been estimated. Instead, a one standard deviation increase in cognitive skills was assumed to increase future earnings by 17 percent following the lower range average in a review of the association between cognitive skills and earnings across countries in Patrinos and Psacharopoulos (2010). Baseline future earnings were modeled as the age earnings profile for primary school graduates using the 2015 Ethiopian LFS. The future stream of additional earnings was multiplied by 62.1 percent

reflecting the latest primary completion rate as those who did not complete primary were assumed not to benefit in order to generate a lower bound estimate of benefits. Because the total composite effect is an estimate with a probability distribution described by its standard error, the resulting stream of benefits also has a probability distribution. This provides a sensitivity analysis for the internal rate of return as described subsequently. Note that Components 1-3 support pre-primary and secondary education quality as well; however, these are ignored in this analysis to provide a lower-bound estimate of benefits.

Table 10. Linear regression model estimates (selected variables) by subject and grade NLA 2015

Grade 4	Reading	English	Mathematics	Env. Sciences	
1:1 textbook ratio in class and	0.351**	0.241**	-0.237	0.433	
textbook used all the time	(0.175)	(0.116)	(0.159)	(0.276)	
during class					
Level 1 / Level C school	0.033	-0.22	-0.109	0.02	
	(0.171)	(0.198)	(0.148)	(0.163)	
Level 3 / Level A school	0.211	0.184	-0.061	0.347	
	(0.2)	(0.243)	(0.106)	(0.299)	
Teacher has a diploma	-0.045	0.34**	0.417***	0.482***	
	(0.12)	(0.162)	(0.109)	(0.184)	
Teacher has a degree	-0.027	0.479***	0.75***	0.512***	
	(0.229)	(0.168)	(0.227)	(0.185)	
Other control variables	Yes	Yes	Yes	Yes	
	-1.97***	-0.812**	-0.463	-0.689	
Observations	(0.368)	(0.395)	(0.551)	(0.535)	
R-Square	4173.00	4160.00	4292.00	4229.00	
Grade 8	English	Mathematics	Physics	Chemistry	Biology
1:1 textbook ratio in class and	0.295	0.216*	0.073	-0.147	0.156
textbook used all the time	(0.189)	(0.127)	(0.076)	(0.141)	(0.113)
during class					
Level 1 / Level C school	-0.299**	-0.325***	-0.391***	-0.442***	-0.395*
	(0.117)	(0.111)	(0.108)	(0.168)	(0.218)
Level 3 / Level A school	0.285	0.129	0.363**	0.26	0.533**
	(0.175)	(0.154)	(0.159)	(0.193)	(0.217)
Teacher has a diploma	0.034	0.258	0.383*	0.22	-0.752***
·	(0.222)	(0.157)	(0.207)	(0.43)	(0.252)
Teacher has a degree	0.234	0.31**	0.282	0.22	-0.487*
_	(0.295)	(0.154)	(0.23)	(0.451)	(0.247)
Other control variables	Yes	Yes	Yes	Yes	Yes
	0.084	-0.109	0.156	-0.128	-0.197*
Observations	(0.102)	(0.137)	(0.121)	(0.145)	(0.112)
	-0.007	-0.004	0.007	-0.014	0.01
R-Square	(0.017)	(0.022)	(0.016)	(0.022)	(0.015)

Standard errors denoted in parentheses and account for intracluster correlation at the school level. Statistical significance at the 1, 5, and 10 percent levels are denoted by ***, **, *, respectively. Other control variables include teacher's experience, gender, student's gender, education of his or her mother and father, student's age and whether the school was located in an urban or rural area.

Table 11. Modeled effect size	of GEOIP II com	ponents on cognitive outcomes

 Representative	Malaa	Mandalad official day
 component indicator	Value	Modeled effect size
Textbook utilization: percent of students bringing textbooks to class	Mathematics: -6.23% Sciences: 2.95% Social sciences: -1.35%	teaching learning materials Change in NLA achievement associated with being in a class that uses textbooks in every class and has 1:1 textbook ratio (see previous table)
 Component 2: Teac	chers and education leader	rs development program
Percent of primary teachers achieving diploma qualification under GEQIP II	38.4% (this is approximated by the number of teachers receiving their diploma qualification under GEQIP II as a percent of primary school teachers in 2018/19)	Change in NLA achievement associated with a teacher having a diploma versus a lower qualification (see previous table)
Compo	onent 3: School improveme	ent program
Percent of schools in level 1 and level 2 upgraded to the next level	57.5% of level 1 schools upgraded to level 2 and 8.5% of level 2 schools upgraded to level 3	Change in NLA achievement associated with being in a level 2 school relative to level 1 and with being in a level 3 school relative to level 2, respectively (see previous table)

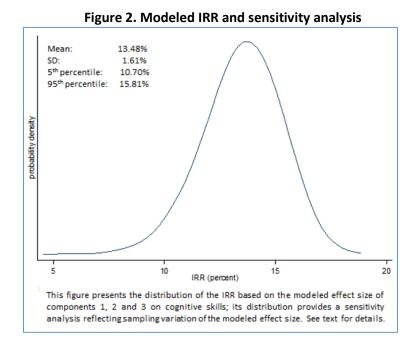
6. Modeled recurrent costs. All costs of Components 1-3 are assumed be recurrent costs to maintaining interventions improving primary school quality. This is an overestimate because not all of the Component 1-3 costs are recurrent, and these costs also finance activities that improve the quality of pre-primary and secondary education. The estimated cost per primary student is 5.90 USD (Table 12). For the cost-benefit analysis, this is converted to the cost per primary-aged individual in the population, which, based on net enrollment rate data published in Ministry of Education for 2018/19, yields a similar per child cost of 5.59 USD. A representative 7 year-old starting school would incur this per child cost until age 14 (regardless of whether he or she drops out of school prior to the end of primary). Note that benefits are assumed only to accrue to children who completed primary as described above.

Table 12. Modeled annualized recurrent costs of GEQIP II

14510 121 111040104 4111441124 105411011 65515 51 62411 11	
	Annualized
	recurrent cost per
	student
Component 1: Curriculum, implementation and teaching learning materials	1.22
Component 2: Teachers and education leaders development program	1.02
Component 3: School improvement program	3.66
Total	5.90

Note: all costs for Components 1, 2 and 3 are included; this is an overestimate as some costs apply to levels of education other than primary and some costs are non-recurrent. Estimates are based on actual expenditure per component at Project closing.

7. **Internal rate of return and sensitivity.** The modeled benefits provide a probability distribution of an increased stream of future earnings resulting from Components 1-3; the modeled costs provide a stream of costs. The difference between the two provides a probability distribution of the stream of net benefits. Because all costs are assumed to be recurrent, the internal rate of return for the net benefits of a representative 7 year-old provides a measure of cost-benefit for the improvement in education quality as a program established by GEQIP II. The estimated internal rate of return is 13.48 percent. As a sensitivity analysis, the probability distribution of the internal rates of return resulting from the probability distribution of the stream of net benefits was also calculated (**Figure 2**). The estimated internal rate of return has a probability distribution with a standard deviation of 1.61 percent. Its 5th percentile is 10.7 percent suggesting a low probability (less than 5 percent) that the Project yielded an internal rate of return less than this based on this modeling approach.





8. The Project also contributed to the expansion of preprimary education through O-class. Children who attend ECE tend to have better cognitive skills (literacy and numeracy) later in life than other children. The ECE promotes school achievements, numeracy and early mathematical skills of children which later help them solve more complicated mathematical problems in high school. For example, Young Lives data from Ethiopia indicate that children who attended preschool perform better in primary school as compared to their peers: 8-year-olds who have attended pre-school scored 43.7 percent higher in vocabulary tests and 51.1 percent higher in the cognitive test than those who did not attend preschool⁴⁵. Likewise, preschool education promotes children reading proficiency in Ethiopia (Table 13); and preschoolers were 38 percent more likely to be a proficient reader than non-preschoolers (Kim J., 2019)⁴⁶. However, given the absence of the evidence between the cognitive skills and earnings in Ethiopia, these benefits are not quantified in this analysis.

Table 13. Preschool attendance and early grade reading assessment (EGRA) outcomes

EGRA Task	(1) 2010 OLS		(2) 2016 OLS		(3) 2016 School-Fixed	
	Coef. (SE)	Effect Size (SE)	Coef. (SE)	Effect Size (SE)	Coef. (SE)	Effect Size (SE)
Oral reading fluency	0.46	0.02	4.15***	0.20***	2.48***	0.12***
	(1.55)	(0.07)	(0.78)	(0.03)	(0.61)	(0.03)
Letter sounds	3.33** (1.53)	0.11** (0.05)	6.48*** (0.91)	0.20*** (0.03)	3.46*** (0.87)	0.11*** (0.03)
Familiar words	1.46	0.08	4.25***	0.21***	2.28***	0.11***
	(1.38)	(0.07)	(0.60)	(0.03)	(0.59)	(0.03)
Invented words	1.61** (0.80)	0.11** (0.06)	2.84*** (0.46)	0.19*** (0.03)	1.60*** (0.43)	0.11*** (0.03)
Reading comprehension (% of correct answer)	1.34 (1.92)	0.05 (0.07)	4.67*** (0.85)	0.17*** (0.03)	2.78*** (0.82)	0.10*** (0.03)
Listening comprehension (% of correct answer)	0.21 (1.64)	0.01 (0.06)	1.85** (0.76)	0.07**	1.20 (0.77)	0.04 (0.03)
Observation	9,121	9,121	8,332	8,332	8,332	8,332

Source: Kim J. 2019. Unpacking the Role of Early Learning in Student Learning Outcomes: Evidence from National Reform of Pre-Primary Education in Ethiopia, University of Cambridge. Data significant at different levels: *p<0.1, **p<0.05, ***p<0.01.

9. Learning outcomes at the primary level have modestly improved (Figures 2 and 3). The assessment results in terms of proficiency levels are positive. The number of students achieving basic proficiency or higher in all subjects between 2011 and 2015 has substantially increased for grades 4 to 8. These achievements are commendable, especially given the huge increases in enrollments. Ethiopia has avoided the deteriorating education quality that often accompanies a rapid expansion of access. The progress has not been uniform. In some critical areas, problems have persisted for years, although in some cases they have diminished over time.

⁴⁵ Woldehanna T., Gebremedhin L. 2012. "The Effects of Pre-school Attendance on the Cognitive Development of Urban Children aged 5- and 8-Years Evidence from Ethiopia." Young Lives, University of Oxford.

⁴⁶ Kim J. 2019. Unpacking the Role of Early Learning in Student Learning Outcomes: Evidence from National Reform of Pre-Primary Education in Ethiopia, University of Cambridge.

23 27 31 48 52 □ Advanced 42 ■ Proficient 69 64 ■ Basic 56 55 45 40 38 ■ Below Basic 33 33 26 2011 2015 2011 2015 2011 2015 2011 2015 2011 2015 Math Biology Chemistry English **Physics**

Figure 3. Grade 8 Comparison of 2011 and 2015 Proficiency Level

Source: Striving for Excellence: Analysis of Ethiopia National Learning Assessments 2011 and 2015 (World Bank, 2016)

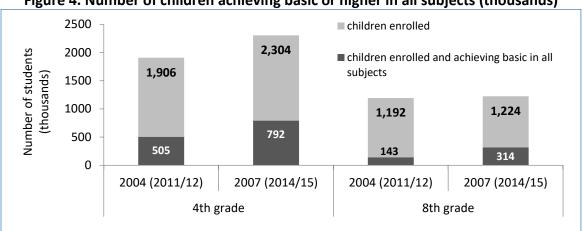


Figure 4. Number of children achieving basic or higher in all subjects (thousands)

Source: Striving for Excellence: Analysis of Ethiopia National Learning Assessments 2011 and 2015 (World Bank, 2016)

Fiscal sustainability analysis

10. **Fiscal sustainability.** A per student cost of 5.90 provides an overestimate of the recurrent costs of the Project based on currently available cost data. Enrollment data for 2018/19 (latest available) suggests that the recurrent costs of maintaining Components 1-3 would represent 2.74 percent of total public education expenditure in 2019 and 4.24 percent of recurrent public education expenditure (**Table 14**). Currently school grants, textbooks, and teacher development program are almost 100 percent financed by Development Partners. To improve sustainability, the successor GEQIP-E required increasing contributions from the GoE to costs, with official budget heads, related to key education sector inputs such as school grants and textbooks that have been covered by external partners for the last decade. The government should be financially responsible, at least partially, for school grants, textbooks, and teachers development.

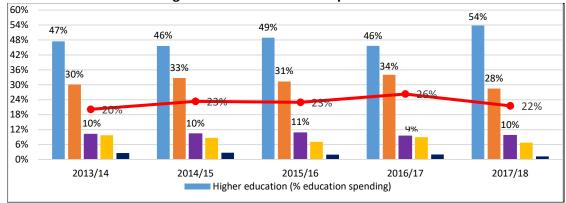
Table 14. Cost of components 1-3 as a percent of government education expenditure

Estimated annual recurrent cost of components 1-3	
Estimated Components 1-3 per primary student (actual at end of Project)	5.90
Number of primary students 2018/19	20,046,357
Total annual recurrent cost 2018/19 (millions USD)	118.34
Government expenditure on education	
GDP current prices, billions USD (2019)	91.17
Government expenditure on education as a percent of GDP (2015)	4.74
Current education expenditure as a percent of total education expenditure (2015)	64.63
Estimated annual recurrent cost of components 1-3 as a percent of	
Government expenditure on education	2.74
Government recurrent expenditure on education	4.24

Note: Cost comparison using 2019 USD as 2018/19 is the latest available estimate of the number of primary students. 2015 is the latest available estimate of the proportion of GDP spent on education. Cost per primary student is the total cost of components 1-3; this is an overestimate as the total cost includes some non-recurrent expenditure and expenditure for other levels of education as well (disaggregation by level and recurrent expenditure is not available).

11. *Education Sector Financing:* The Government of Ethiopia is highly committed to investing in education and the sector accounts for the largest proportion of the Government's spending at 22 percent of total expenditure in 2017/18 reflecting the country meets the internationally agreed targets set out by the Education for All (EFA) coalition of 20 percent of total government expenditure heading to finance education expenditure (figure 5). Public spending on education in Ethiopia increased by 104.3 percent in real terms between 2013/14 and 2017/18. This increase is largely a result of the expansion of the higher education and school enrollment up to grade 12 rising from 22 million to more than 27 million. However, only 38 percent of the education spending was headed to finance primary and secondary education (with 28 percent and 10 percent shares, respectively) in 2017/18. Improvements are thus required in the composition of education spending by reallocating government expenditure within the education sector towards general education for equity considerations. The total education expenditure as percentage of GDP remained above 4 percent in recent years.

Figure 5. Education sector expenditures



Source: Data from MoE.

ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

1. No comments received from the Borrower or co-financiers.

ANNEX 6. REVISED PDO INDICATORS AND REVISED COMPONENTS

- 1. The PDO indicators were updated at MTR in order to: (i) ensure that they are measurable using reliable and available data sources, and (ii) ensure that they reflect changes in components and subcomponents of the Project (para.20). Revised PDO indicators are presented below.
- PDO-level indicator 1 "Student-textbook ratio". At the beginning of GEQIP II, the baseline for this indicator was set at 1:0.65, based on findings from a comprehensive evaluation conducted at the end of GEQIP I. The target at the end of the Project was to improve this ratio to 1:0.90, which was surpassed at the MTR. Yet, the measurement of textbook availability and utilization warranted adjustments in this PDO indicator. The first set of challenges relates to the MoE's and regions' capacity to match the demand and supply for textbooks. The second was that even when GEQIP II textbooks reach schools, many students did not bring textbooks to classes, essential to facilitate the teaching and learning process in the classroom. This was particularly true for Mathematics and Language lessons, as the textbooks contain classroom activities. This PDO level indicator, therefore, was divided into two parts in order to capture achievements related to: (i) newly procured textbooks, and (ii) existing textbooks that are in reprint. The new textbooks encompassed textbooks for 7 mother-tongue languages (MT) for grades 1 to 8. For these new textbooks, the focus of the PDO indicator was accessibility, measured through student-textbook ratio. As no MT textbooks were procured by the time of MTR, the baseline for student-textbook ratio was set at 1:0. The target at the end of the Project was to improve this ratio to 1:1. For the existing textbooks in reprint, the focus of the PDO indicator was set to be on effective utilization in the classroom. For measurement purposes, the percentage of students who bring their textbooks to the classroom was used as a proxy for this outcome indicator (with a focus on mathematics, science and social science textbooks). At the end of GEQIP I, the percentage of students who brought their textbooks to the classroom was 58 percent. The target at the end of the Project was to increase the percentage of students who bring their mathematics and science/social science textbooks to the classroom to 90 percent and 70 percent respectively.
- 3. **PDO-level indicator 2 "Percentage of teachers adopting active teaching methods".** In the PAD this indicator was to be measured through a survey of sample schools, by observing whether teachers asked questions during lessons in the classroom or not. The baseline, which was set during the comprehensive evaluation of GEQIP I, suggested that 71 percent of teachers were using active teaching methods at the time; the target was to increase this percentage to 80 percent at the end of GEQIP II. However, this indicator is not being measured systematically and effectively. Primarily, it was difficult to measure the indicator representatively and consistently using survey approach, by simply observing whether teachers asked questions or not. While asking questions (assuming the questions are the right ones) can reflect good teaching practices, it is only one dimension of active and quality teaching. In order to address these measurement issues by exploiting existing data sets in the system, the indicator was revised to 'Index of average scores of inspection standards on Teachers Knowledge, Lesson Planning, Teaching Practices and Assessment Practices.⁴⁷ The index was constructed by taking a simple mean of the percentage scores in the following four inspection standards: (i) standard 11 "Teaching is well planned with appropriate resources"; (ii) standard 12 "Teachers having adequate knowledge of the subjects that they teach; (iii)

⁴⁷ In the inspection framework score below 50 percent is classified as level 1, 50 percent-69.99 percent classified as level 2, 70 percent-89.99 percent classified as level 3 and 90 percent-100 is classified as level 4.

standard 13 "Teachers use modern teaching methods to increase student participation" and (iv) standard 18 "Teachers conduct appropriate assessment of students' learning and giving suitable feedback to students". The baseline of the index was set for Level 1 and Level 2 schools, using the available detailed inspection data for 18,372 primary and secondary schools in nine regions that were inspected in 2013/14 and 2014/15 academic years⁴⁸. Using this data set, the baseline for Level 1 and Level 2 schools was 45.9 percent and 59.6 percent score in the index respectively. The goal at the end of the Project was to show improvement in this index for Level 1 and Level 2 schools.

- 4. **PDO-level indicator 3 "Percentage of schools using at least half of their SGs allocation for the SIP teaching and learning domain".** In the PAD, this indicator was to be measured through independent SG evaluations and the original target was that "50 percent of schools use 50 percent of their SG towards the teaching-learning domain". Prior to the MTR, the first evaluation was conducted on a sample of 711 schools. The findings of the evaluation showed that 100 percent of the surveyed schools were utilizing 50 percent of their SG towards the teaching- learning domain. Based on these finding, although the indicator itself remains unchanged, at MTR the target for this indicator for the remaining two years was increased to "100 percent schools use 50 percent of their SG towards the teaching learning domain".
- 5. PDO-level indicator 4 "Percentage of woredas in each region implementing school report cards". At the time of the MTR, the school report card remained at concept/design stage. On the other hand, the implementation of the school inspection yielded individual school performance reports, de facto serving the function of increased school accountability. Therefore, following the MTR this indicator was dropped from the result framework.
- 6. **PDO-level indicator 5 "Reduction in dropout rate in grade 1 by 5 percentage points by the end of GEQIP II".** The baseline for Grade 1 dropout rate was 25 percent⁴⁹, which was reported in the 2011/12 ESAA. The 2014/15 ESAA reported that the national Grade 1 dropout rate was reduced to 19 percent. Therefore, the original target of 5 percentage point reduction was surpassed at mid-term. The GEQIP II target, therefore, was stretched further to 17 percent by the end of the program.
- 7. **PDO-level indicator 6 "25 percent of schools ranked Level 1 and 25 percent of schools ranked Level 2 move up one level respectively".** This indicator was measured regularly in most regions of the country. By MTR, close to 33,481 schools have been inspected. Given the very high number of schools at Level 1 and Level 2, the target of improving 25 percent of them to the next level appeared to be unrealistic. Therefore, the target was adjusted at MTR to improving 10 percent of the Level 1 schools to Level 2 and 5 percent of the Level 2 schools to Level 3.⁵⁰

⁴⁸ Detailed data from the 2013/14 and 2014/15 inspections was not available for Ethiopian-Somali and Gambella regions.

⁴⁹ Due to significant delays in the release of the ESAA, the drop-out rate of 2010/11 reported in the 2011/12 ESAA was used to set baseline at the beginning of the Project.

⁵⁰ The targets for improving Level 1 and Level 2 schools to Level 2 and Level 3 respectively refer to schools that have detailed data in the 2013/14 and 2014/15 inspections. Given the large number of schools that are below standard the among the 18,372 schools with detailed data, it was agreed that this is a reasonable target for the remaining two years of the project.



Table 15. Revised PDO Indicators

				Formally	Actual	Comments				
Original PDO	Revised PDO	Baseline	Original	Revised	Achieved at	Comments				
Indicators	Indicators		Target	Target	Completion					
Objective/Outcome 1: Improving learning conditions in primary and secondary schools:										
PDO Indicator 1:	PDO Indicator 1A:	1:0.65	1:0.90		1:2.4 ⁵²	Achieved (original				
Student	Textbook-pupil ratio ⁵¹	(2013)				target surpassed at				
textbook ratio	(reprints)	(====)				the time of the first				
	(restructuring, and				
						at completion).				
						Indicator				
						disaggregated into				
						new PDO indicators				
						1B and 1C.				
	PDO Indicator 1B:	1:0		1:1	1:1	Achieved. The ratio				
	Textbooks availability	(2017		(2017)		is close to 1:1 target				
	as measured by ratio	MTR)		,		according to the				
	of primary students to	,				procurement data.				
	newly procured mother									
	tongue textbooks (new									
	indicator/target) ⁵³									
	PDO Indicator 1Cs:	58%		90% for	51.77% for	Not achieved.				
	Textbooks utilization	(2013)		Mathematics	math, 60.95%					
	as measured by			70% for	for science and					
	percentage of students			Science/Social	56.65% for					
	that bring their			Science	social science					
	textbooks to school			(2017)	(2019 GEQIP II					
	(new ambitious				exit					
	indicator/target				evaluation)					
	introduced)									
PDO Indicator 2:	PDO Indicator 2:	0.71	0.8	Progress in index	46.4% for	Achieved at				
Percentage of	Teacher effectiveness			(Dec. 2018)	Level 1	completion on the				
teachers	measured as an index				schools; and	basis of the revised				
adopting active	of average scores of			Baseline:	59.5% for	target. However, as				
teaching	school inspection			45.4% (Level 1);	Level 2 schools	reported, there is a				
methods	standards on teacher			59.3% (Level 2):	based on the	comparability issue				
	knowledge, lesson				2016/17 and	with evaluating				
	planning, teaching				2017/18	progress against the				
	practices and				reinspection	original target.				
	assessment practices				report					
PDO Indicator 3:	PDO Indicator 3: No	0%	50%	100%	74% (2018 SIP	Original target was				
Percentage of	change (increased	0/0	3070	(2017)	and SG	achieved at				
schools using at	target)			(2017)	evaluation)	completion.				
least half of their	101800				Cvaldation)	Significant progress				
icast half of thell	1	<u> </u>	l	<u> </u>	1	Jigimicant progress				

⁵¹ In the core subjects of primary and secondary education (reprints; PAD p.37). Core subjects include mathematics, the mother tongue, English, and the sciences (PAD p.6).

⁵² Updated AF Project Paper (July 12, 2017).

⁵³ These include textbooks for 7 mother-tongue (MT) languages for grades 1 to 8. As no MT textbooks have been procured so far, the baseline for student-textbook ratio is set at 1:0. The target at the end of the project is to improve this ratio to 1:1.

		T	T		T	T						
school grants						was made towards						
allocation for the						the formally revised						
SIP teaching and						end-of-project						
learning domain						target that was						
						partially achieved.						
-	Objective/Outcome 2: Strengthening institutions at various education management levels including increased MoE capacity											
	for evidence-based decision making as reflected in the following proxy indicators PDO Indicator 4: Prepared and as a limit property in the following proxy indicators of the fo											
PDO Indicator 4:	Dropped	0%	50%	Dropped and as a		Implementation of						
Percentage of				result reporting		school inspection						
woredas in each				discontinued		yielded individual						
region				(2017)		school performance						
implementing						reports, de facto						
school report						serving the function						
cards						of increased school						
						accountability.						
PDO Indicator 5:	PDO Indicator 5:	25.00	20.00	17.00	25.00	Formally revised						
Reduction in	No change of the			(2017)		end-of-project						
dropout rate in	indicator (increased					target was not						
grade 1	target)					achieved (due to						
						increased conflict/						
						violence in the						
						country). Original						
						target was not met						
						at completion as it						
						had been surpassed						
						and a more						
						ambitious target set						
						at the time of						
						restructuring. Still,						
						several cohorts						
						benefitted from						
						reduction in						
						dropouts.						
PDO Indicator 6:	PDO Indicator 6:	0%	25% to	10% of Level 1	57.5 % of level	Original target was						
Percentage of	No change of the		level 2	schools move to	1 schools	revised at Project's						
Grade 1 and	indicator (target		and 25%	Level 2; 5% of	move to level	restructuring as too						
Grade 2 schools	modified in line with		to level 3	Level 2 schools	2 or level 3;	many schools were						
that have moved	the obtained baseline)			move to Level 3	and 8.5% of	reported to be level						
up to Grade 2				(2017)	level 2 schools	1 and level 2						
and 3					move to level	according to the						
respectively					3 based on	inspection						
					21,363 schools	standards. The						
					re-inspected in	original target was						
					2016/17 and	partially achieved						
					2017/18	and the formally						
						revised end-of-						
						project target was						
						achieved at						
						completion.						

8. Following the MTR, GEQIP II components were revised with a view to better align project activities with the PDOs (para. 24). Revised components are presented below.

Component 1: Curriculum implementation and teaching learning materials (US\$91 million)

9. This component was revised as follows. Subcomponent 1.3 "Assessment and Examinations" and subcomponent 1.4 "Inspection" were taken together to constitute "Quality Assurance System" subcomponent under Component 4 of the Project to better align project activities with the PDOs. Allocations for the component 1 were reduced accordingly. Updated Component 1 "Curriculum implementation and teaching learning materials", therefore, encompassed two subcomponents: (i) curriculum implementation; and (ii) teaching learning materials. The objective of the subcomponent 1.1 "Curriculum implementation" was to enhance the quality of the primary and secondary curriculum by strengthening the institutional capacity of regional educational bureaus through (i) assessment of the impact of the National Curriculum Framework 2010 (NCF 2010); (ii) translation, printing and distribution of curriculum materials to the regions; (iii) focused curriculum studies and study visits; and (iv) realignment of the general education curriculum with TVET and higher education curriculum. Subcomponent 1.2 "Teaching learning materials" aimed to finance the reprinting of Grade 1-12 textbooks; Grade 1-8 mother tongue textbooks and teachers' guides in arts, visual arts, music, and physical education; and books in Braille for the visually impaired students. In addition, the subcomponent was revised to develop and distribute KG - grade 12 supplementary materials and readers by the end of the Project.

Component 2: Teachers and education leaders development program (US\$76.3 million)

10. This component was revised to include professional development program for education leaders. The subcomponents and allocations were revised accordingly to reflect this change. The revised component encompassed: (i) subcomponent 2.1. "Leadership program"; and (ii) subcomponent 2.2. "Teacher development program". At the same time, subcomponent 2.3 "Licensing and relicensing of teachers and school leaders" was merged to quality assurance systems under component 4 of the Project. Subcomponent 2.1 "Leadership development program" (university/college based) aimed at improving the qualification of school managers by providing one-year leadership program to school principals and supervisors by universities. Subcomponent 2.2 "Teacher development program" aimed to improve preservice and in-service primary and secondary teacher training. Pre-service TDP encompassed: (i) improving the selection of teacher training entrants and strengthening teacher education programs, including pre-service student teaching experience (practicum); (ii) strengthening English Language Improvement Centers (ELICs); (iii) providing professional development for teacher educators; and (iv) establishing one Ethiopian university faculty of education and its cluster of CTEs as a national Centre of Excellence in Teacher Education. In-service teacher training covered: (i) primary and secondary teacher upgrading (summer upgrading programs provided by CTEs for primary teachers and Universities for secondary teachers); (ii) improving the delivery of the English Language Quality Improvement Program (ELQIP); and (iii) updating short-term training integrating mathematics and science program with school level CPD.

Component 3: School improvement program (US\$273 million)

11. Subcomponent 3.1 "School improvement program" remained the same. Specific activities under subcomponent 3.2 "School grants" were revised to include SG to specifically support education of O-Class

students and children with disabilities (additional funds of US\$18 million were reallocated to component 3 to cover these additional grants).

Component 4: System Management and capacity building program (US\$30.3 million)

12. Component 4 was revised to include: (i) subcomponent 4.1 "EMIS"; (ii) subcomponent 4.2 "Quality assurance systems"; and (iii) subcomponent 4.3 "Capacity building". Subcomponent 4.1 EMIS continued to support capacity building and IT infrastructure while support for school report cards was discontinued since school inspection reporting de facto developed into a school accountability structure. Subcomponent 4.2 "Quality assurance systems" encompassed three types of quality assurance as per ESDP-V: (i) student learning assessment; (ii) teacher assessment through licensing and re-licensing; and (iii) school assessment through school inspection. Subcomponent 4.3 "Capacity building" aimed to provide capacity building to school principals, woreda, regional and federal level education managers (short-term training) through: (i) school leaders updating; (ii) woreda, regional and federal capacity building; and (iii) special support for emerging regions.

Component 5: Information and communication technology (ICT) (US\$33.2 million)

13. This component was revised to build ICT infrastructure and skills within the education sector through: (i) policy development and capacity building for the Centre for Educational ICT (CEICT); (ii) provision of Ecloud infrastructure; and (iii) e-learning system development. Subcomponent 5.1 "National ICT in education policy development and Capacity building for the CEICT" covered: (i) the development of the autonomous ICT in education agency; (ii) capacity building program for CEICT; and (iii) change management program. Subcomponent 5.2 "Provision of E-cloud infrastructure" aimed to provide an ecloud infrastructure (re-tendered) to provide ICT-enabled quality learning at 300 secondary schools and 10 Teacher Training Institutions. Subcomponent 5.3 "E-learning system development (LMS)" aimed to develop LMS system to enable curated content and software to be used by teachers and students for teaching and learning.

<u>Component 6</u>: Program planning, coordination, monitoring and evaluation and communications (US\$16.5 million)

- 14. This component was not revised.
- 15. The below Results Chain demonstrates how the contributions envisaged under the Project were expected to trigger changes leading ultimately to development outcomes.

ANNEX 7: LESSONS LEARNED FROM GEQIP I

- 1. The design of GEQIP II considered the following lessons and achievements from the implementation of GEQIP I:
 - (i) Increase the quality of general education throughout the country through improving teaching and learning:
 - The pupil-to-new textbook ratio averaged 1:1.33 meeting the target ratio for each of 1:1, though the books were still being distributed at the end of the Project due to delays in procurement. This is important as availability of textbooks is positively correlated with students' National Learning Assessment results (ICR, p. 11).
 - Between 2006/2007 and 2012/2013, the proportion of qualified teachers with appropriate qualifications (diploma or degree) in grades 1-4 increased from 3.4 percent to 43.8 percent, surpassing the target of 15.7 percent; in grades 5-8 from 53.4 percent to 92 percent, surpassing the target of 56 percent; and in grades 9-12 from 49.8 percent to 91.5 percent, surpassing the target of 70 percent.
 - As in many other countries in the region, student assessment scores might have been negatively impacted by the enrollment of new students (ICR, p.15). Scores on national examinations for primary education decreased by 2.1 percent for grade 4 and 0.8 percent for grade 8 between 2006/2007 and 2011/2012. This decrease was smaller than that between 2003/2004 and 2006/2007, when scores fell by 15.6 percent for grade 4 and 10.4 percent for grade 8. From 2009 to 2013, scores improved in secondary education for grade 10 by 13.1 percent, but decreased for grade 12 by 4.1 percent.⁵⁴
 - Between 2006/2007 and 2012/2013, the percentage of students passing the exam to complete primary education increased from 49.8 percent to 81.8 percent, and for secondary education increased from 42.6 percent to 70.1 percent. Between 2006/2007 and 2012/2013, the percentage of students passing the grade 12 national examination increased from 90.3 percent to 97.9 percent. This improvement occurred while the number of students taking those national examinations increased by 240 percent.
 - Schools participating in the School Improvement Programs established committees consisting of teachers, parents and schools to prepare annual and three-year strategic plans. Closer cooperation between teachers and students, such as through teacher-parent conferences, was found to have a positive, statistically significant correlation with students' National Learning Assessment scores (ICR, p. 14).
 - (ii) Increase the quality of general education throughout the country through enhancing management, planning and budget capacity of the MoE and the REBs:
 - 98 percent of schools and Alternative Basic Education centers completed School Improvement Plans approved by Parent-Teacher Associations/School Boards/School Improvement Committees, meeting the target. These School Improvement Plans aimed to identify challenges in schools, develop priorities based on these challenges, and prepare plans to address them, even though some schools received grants with delay⁵⁵.

5

⁵⁴ In general, the comparison between different years faced limitations as exam content was not consistent.

⁵⁵ According to the Beneficiary Survey, the woreda levels experienced delays in obtaining funds from regional bureaus, faced budget shortages, and lacked trained personnel to implement the school grants program. Schools and Alternative Basic Education Centers, which were located in remote areas, experienced delays in receiving funding and lacked trained personnel to use funds and report fund utilization to the woreda level as required.

- Annual work plans were developed by the MoE and regional directorates. The MoE conducted
 procurement of textbooks. Teachers report that they have been experiencing support for
 professional development from education bureaus on the regional and woreda level.
- School grant audits were conducted with substantial delays and covered 2 percent instead of 10 percent of schools as was initially planned. The Project Team later explained that the sheer scope of the Project prevented auditing of 10 percent of schools, and that the follow-on GEQIP-II planned audit scope of 3 percent of schools.

ANNEX 8: THE HIGHER-LEVEL APL PROGRAM OBJECTIVES

The higher-level APL program objective 1: Improved learning outcomes by increasing the percentage of students attaining basic or above competency in Mathematics and languages at grades 4, 8, 10 and 12

- 1. Learning outcomes have shown some improvement based upon progress made on education inputs and the learning environment under GEQIPs. The National Learning Assessment (NLA) showed positive results with respect to proficiency levels alongside progress made on education inputs and the learning environment under GEQIPs. 56 The number of students achieving basic proficiency or higher generally increased for the grades tested. In 4th grade, while enrollment increased by 21 percent, the total number of students achieving basic proficiency or higher in all subjects increased from 505 thousand in 2011 to 792 thousand in 2015 (57 percent increase) (Annex 4, Figures 3 and 4). This result is especially commendable given the enrollment influx of students from families of lower socioeconomic status (SES) who tend to have lower learning outcomes. At Grade 8, a noticeable improvement has been observed: the total number of students achieving basic proficiency or higher increased by 120 percent (the total number of students achieving basic proficiency or higher in all subjects increased 2.2 times from 143 thousand to 314 thousand). As to grade 10 and 12, 2014 NLA showed the mean score of 40.6 percent for Grade 10 and 47.8 percent for Grade 12. Comparing to the 2010 results, the 2014 result showed an improvement in Grade 10 but a small decline in Grade 12. The third round of Grade 10 and 12 NLA was conducted in May 2017. Results showed that the performances of grade 10 and 12 were lower than that of 2013 in all subjects (English, mathematics, biology, chemistry and physics).
- 2. The results of the analysis show that there is still a high proportion of students performing at below the basic level. Analysis of test item distractors shows that a significant number of students in Grade 4 did not grasp fundamental concepts such as how to calculate an area of a shape. Similar misunderstandings led to a sizable share of Grade 8 students not being able to calculate a volume of an object. Since the majority of Grade 4 students do not read at proficiency level, earlier interventions are necessary and this led to the GEQIP-E interventions of O-class and more focus on earlier stage (such as early grade and O-class interventions). The result of NLA also showed significant variations in learning outcomes between different student groups across all subjects. Boys in general perform better than girls. Students in urban areas outperform students in rural areas. Non-governmental schools achieve higher results than government schools. Regions that are more economically developed have a significantly higher share of their students reaching basic proficiency levels than emerging regions and regions with high rural population. Teacher qualification generally has a positive association with learning achievement. In most schools, having one textbook per student has the strongest association with 8th grade learning achievement, though results vary by subject.

⁵⁶ The NLA defines four proficiency levels, relative to subject and grade-specific learning goals: 1) Below Basic: Only a minimal understanding of the subject and lack of skills to solve simple problems appropriate at the grade level; 2) Basic: Partial understanding of the subject and skills to solve some simple problems appropriate at the grade level; 3). Proficient: Solid understanding of the subject and skills to solve a wide variety of problems appropriate at the grade level; and 4) Advanced: Comprehensive and in-depth understanding of the subject and skills to provide sophisticated solutions to complex question.

The higher-level APL program objective 2: Improved efficiency in primary and secondary education by increasing (i) the completion rate in Grades 5 and 8 and (ii) the Gross Enrollment Rate (GER) in 1st and 2nd cycle of secondary education

3. In parallel with remarkable progress in expanding enrollments, Ethiopia achieved significant progress on APL program objective 2 and improved internal efficiency in primary and secondary education during GEQIP II implementation, as measured by completion rates in grades 5 and grade 8, and GER for the 1st and 2nd cycle of secondary education (Table 16).

Table 16. Internal efficiency indicators (higher-level APL objective)

Indicators	2013/14	2018/19	Progress
Completion rate to Grade 5, female	68.2	84.3	24%
Completion rate to Grade 5, male	70.7	92.8	31%
Completion rate in grade 8, female	46.7	59.7	28%
Completion rate in grade 8, male	46.7	64.4	38%
GER in 1st cycle of secondary education (grades 9-10), female	38	45.6	20%
GER in 1st cycle of secondary education (grades 9-10), male	40.4	51.3	27%
GER in 2nd cycle of secondary education (grades 11-12), female	9.1	13.2	45%
GER in 2nd cycle of secondary education (grades 11-12), male	10.7	16.4	53%

Source: EMIS data.

The higher-level APL program objective 3: Sustained government commitment for adequate financing of education sector through maintaining the percentage of general education budget allocated to non-salary recurrent expenditure and the education expenditure as a percentage of the total government budget.

4. The Government is highly committed to investing in education and the sector accounts for the largest proportion of the Government's spending at 22 percent of total expenditure in 2017/18. The country meets the internationally agreed targets set out by the Education for All (EFA) coalition of 20 percent of total government expenditure to finance education expenditure. Public spending on education in Ethiopia increased by 104.3 percent in real terms between 2013/14 and 2017/18. This increase is largely a result of the expansion of the higher education and school enrollment up to grade 12 rising from 22 million to more than 26 million. As it is shown in Annex 4 (Figure 5), primary and secondary levels of education accounts for 38 percent of education spending (with 28 percent and 10 percent, respectively). Overall, improvements are required in the composition of education spending by reallocating government expenditure within the education sector towards general education to ensure more equitable spending. In the view to give decision-making power to local administrations, regional and local governments in Ethiopia are responsible in planning and resource mobilization for the education sector for their respective constituents. Accordingly, more than half of the education budget is being managed by the regional and local governments. This demonstrates the Government's effort in promoting universal access to primary education at the grassroots level and expansion of secondary education, and the implementation of targeted interventions to close the existing regional, gender and urban-rural enrollment differentials.

Overall APL program

- 5. For GEQIP I, achievement of the objective (efficacy) to increase education quality through improvements in teaching and learning in schools was rated Substantial due to evidence on teacher training, provision of textbooks, and learning outcomes and the achievement of the objective to enhance management, planning and budget capacity of the MoE and REBs was rated Modest due to shortcomings in training, financial flows, and audits at the woreda level (IEG ICRR14572).
- 6. The APL program was transformational on a number of fronts. It was instrumental in improving the supply and deployment of qualified teachers as well as providing teacher training, textbooks, learning materials and school grants. An inspection system was introduced under which almost all 35,000 schools in Ethiopia have been externally inspected and classified into four levels of performance. GEQIP has resulted in enhanced quality of inputs and markedly improved student-input ratios. Importantly, while the school system expanded from having 10 million learners in 2008/9 to more than 26 million learners in 2018/19 during the GEQIP series lifetime, Ethiopia has been successful in increasing the number of learners attaining basic or above competency in mathematics and languages.

ANNEX 9. SUPPORTING DOCUMENTS

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