

Accelerating Progress to 2015

Ethiopia

APRIL 2013 • WORKING PAPER



Global Education First Initiative

The UN Secretary-General's Global Initiative on Education



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ACKNOWLEDGMENTS

This background paper is one in a series of country reports commissioned by the UN Special Envoy for Global Education and coordinated by the Center for Universal Education at the Brookings Institution. The report was prepared for the Learning for All Ministerial Meeting on April 18, 2013, co-hosted by the World Bank President, the UN Secretary-General, and the UN Special Envoy for Global Education. The meeting brings together ministers of finance and education from eight countries that are home to nearly half the world's out-of-school children. It aims to focus on concrete steps that will accelerate progress toward the 2015 deadline of ensuring that all children can go to school and learn.

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The report builds on contributions of many stakeholders but does not necessarily represent the views of all its contributors.

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Foreword by Gordon Brown © 2013

FOREWORD

Gordon Brown, UN Special Envoy for Global Education

Thirteen years ago the international community came together and made a commitment, through the Millennium Development Goals and Education for All, to achieve universal education. While we have made significant progress by securing education for over 40 million more children, we have an unfinished agenda. There are still 61 million children that do not go to school and 250 million children who cannot read. The statistics for youth at the secondary level are even more shocking—especially for girls.

Now, fewer than 1,000 days from our deadline, the clock is ticking. And thanks to the leadership of the United Nations Secretary-General and his Global Education First Initiative, focusing on access, quality and global citizenship, the wheels of progress are in motion. By convening the global community to focus on the goal of quality, relevant and inclusive education for all children and youth, the Secretary-General is inspiring action in all corners of the globe. His initiative acknowledges that if we are to hold true to our commitment of ensuring every child in every marginalized slum or forgotten village has access to education, we must take action.

President Jim Kim of the World Bank is focused on solutions for our global challenges as evidenced by his path-breaking speech on April 2nd of this year on the post-2015 Millennium Development Goals and his commitment to abolish extreme poverty and work for shared prosperity. His leadership in convening the *Learning for All Ministerial* meetings represents an unprecedented turning point for global education.

Both the Secretary-General and President Kim are providing an opportunity for collective partnership between the international community and countries themselves to address the critical bottlenecks that are holding us back by creating a set of action plans with concrete outcomes. Their leadership has inspired the participation of ministers of finance and education from eight countries, representing more than half of the world's out of school population, and leaders from partner governments, international institutions and civil society. Other countries will come before a set of meetings in September of this year.

In preparation for the ministerial meeting, we have commissioned reports on the eight participating countries so that our time together would be spent realizing the vision of the Secretary-General's Global Education First Initiative and discussing what will be done. I am grateful to the Global Partnership for Education and the Center for Universal Education at the Brookings Institution for their major contributions to this exercise and to the support of international development partners in every continent.

The proposals in this report represent a snapshot of the ongoing conversations within countries and with the international community. Considered a “living document,” the working paper on Ethiopia is an initial set of proposals to accelerate progress on education.

Based on the recommendations in this report and in collaboration with the respective government, international institutions and civil society during the *Learning for All Ministerial* meetings, we have an opportunity to change the course of history and deliver meaningful change to children across the globe.

When you read this report you will see glossy pages, graphs, charts and statistics. While the data is critical, I implore you to take a moment to think about the stories that the statistics represent. They represent the young girl, rising-up against the cultural norm of early marriage in hopes of realizing her dreams. They represent the young boy, struggling to realize his potential, studying under a tree. They represent a child with disabilities, with all of the talents and aspirations to be a world leader. They represent the hopes and dreams that are the right of every human being.

Past generations have developed only some of the potential of some of our children. We can be the first generation to realize all of the potential of all of the world's young people through education. I hope that the ideas brought together through global consultations and synthesized in this report can guide our discussions in realizing the vision of the Secretary-General and the leadership of President Kim aimed at creating a world in school and learning by 2015. ✎

ACRONYMS

ABE	alternative basic education
DHS	Demographic Household Survey
EGRA	Early-Grade Reading Assessment
EMIS	Education Management Information System
ESDP	Education Sector Development Program
GDP	gross domestic product
GER	gross enrollment rate
GPI	Gender Parity Index
GEQIP	General Education Quality Improvement Program
IQPEP	Improving Quality of Primary Education Project
MOE	Ministry of Education
MOFED	Ministry of Finance and Economic Development
NER	net enrollment rate

EXECUTIVE SUMMARY

Ethiopia has made remarkable progress in recent years. Building on sustained economic growth and a strong determination to reduce poverty, the government has invested heavily in improving its education system. In 1997, it embarked on an impressive 20-year education reform program, articulated in a series of four comprehensive Education Sector Development Programs (ESDPs). The plans were developed through a participatory process involving all levels of government—federal, regional, and woreda—as well as development partners. Since ESDP I, the government developed and implemented several key policies to increase access and quality of education, involving both federal and regional governments.

Ethiopia also matched its ambition with resources. Spending on education increased from 11 percent of total spending in 1999–2000 to 25 percent (or \$1.4 billion) in 2010–11. The number of primary schools increased from nearly 11,000 to over 31,000; the number of classrooms from nearly 72,000 to nearly 300,000; and the number of teachers from over 105,000 to about 321,000 between 1999–2000 and 2011–12.

These significant investments have yielded impressive results. The primary net enrollment rate has more than doubled in the last decade, from just 40 percent in 2000–2001 to 85 percent in 2011–12. During the same period the primary gross enrollment rate increased from 57 percent to 95 percent. The Gender Parity Index also improved significantly, and now stands at 0.95. Despite the unprecedented expansion, the student section ratios have remained more or less constant around 57. National Learning Assessment results for grade 4 also suggest that the decline in learning achievements in early grades, observed during the early years of the expansion, has been stabilizing.

With such robust progress, achieving universal primary education is now within reach. In order to reach this goal, however, Ethiopia will need to tackle three outstanding challenges: disparity in access, low learning outcomes, and high repetition and dropout rates. The 3 million children who remain out of school often face multiple and overlapping disadvantages based on the region where they live, their family's income, and their gender. Despite best efforts, the dramatic increase in access has overwhelmed the system's ability to deliver quality, resulting in disappointing learning outcomes, high repetition rates and low retention rates.

A number of barriers and bottlenecks, which are in some cases more challenging than in earlier periods, will need to be addressed. With around 30 percent of the population living in poverty, the indirect costs of education prove to be a deterrent to sending children to school. These economic barriers are further exacerbated by various sociocultural factors affecting demand. School infrastructure needs to be further enhanced, more teachers need to be qualified, and more appropriate teaching tools need to be deployed. Within Ethiopia's large and complex decentralized system, capacity and governance constraints also need to be addressed.

Tackling these outstanding challenges will require further investments and reforms, many of which are already being developed and implemented and go beyond the scope of this paper. Further implementation of the government's Education Sector Development Program and General Education Quality Improvement Program will be critical. This paper aims to add value to these ongoing efforts by setting out a number of concrete proposals that will produce tangible gains for Ethiopia's children.

The paper and its proposals provide background for the Learning for All Ministerial scheduled for April 17–18. It should be emphasized that the proposals that follow are not intended as a comprehensive response to all the development needs facing the Ethiopian education sector. The objective, set out in the terms of reference for the Ministerial, is to identify a number of key areas where strengthened cooperation and action might add value to current efforts.

The proposals include:

- Community mobilization, school construction, text book provision, and teacher training designed to *cover the needs of the 3 million children who are still out of school*;
- In-service teacher training for early-grade reading teachers, a performance-based school grant program and a targeted ICT program *focused on reducing dropout rates and enhancing learning*; and
- A capacity-building program at the *woreda* (local district government) level and information system improvement program targeted at *better identifying and monitoring out-of-school children and dropouts*.

If successfully implemented, the proposals collectively could have the effect of:

- Bringing the remaining 3 million out-of-school children into school and achieving universal primary education;
- Improving learning for close to 6.5 million early-grade readers and providing performance incentives to 50 percent of schools, with positive effects on retention and completion rates;
- Strengthening local governments' capacity to identify out-of-school children and dropouts and plan improved service delivery for these groups.

The total estimated cost of the program for the 2013–15 period is \$792 million (\$264 million per annum). The Government is already allocating a large share of its own budget to education but it is willing to raise this further to cover nearly two thirds or \$503 million of the total estimated cost of the proposed programs. It would however need the remaining \$289 million (\$96 million per annum) of the incremental funding to come from donor sources.

I. Achieving Universal Primary Education in Ethiopia

Ethiopia's long-term vision is to “become a country where a democratic rule, good-governance, and social justice reigns, upon the involvement and free will of its peoples; and once extracting itself from poverty becomes a middle-income economy” (MOFED 2010, 7). This vision calls for a continued expansion of access to high-quality basic education and special efforts to improve the overall literacy level of the population. As such, Ethiopia is strongly committed to the aspirations set out in the Millennium Development Goals and the Education for All goals. Building on progress made, it has strong potential to reach these goals.

I.1 Two Decades of Remarkable Progress

Since emerging from a protracted civil war in 1991, Ethiopia has achieved remarkable results in key development areas. Over the past decade, the Ethiopian economy has grown at twice the rate of Africa as a whole, with an average of 10.6 percent GDP growth per year between 2004 and 2011. As a result, 2.5 million people have been lifted out of poverty during the past five years, bringing the poverty rate down from 38.7 percent to 29.6 percent between 2004–5 and 2010–11 (World Bank 2012b). The Growth and Transformation Plan, launched in 2010–11, aims to further reduce poverty to 22.2 percent by 2014–15 and make Ethiopia a middle-income country by 2020–23 (MOFED 2010).

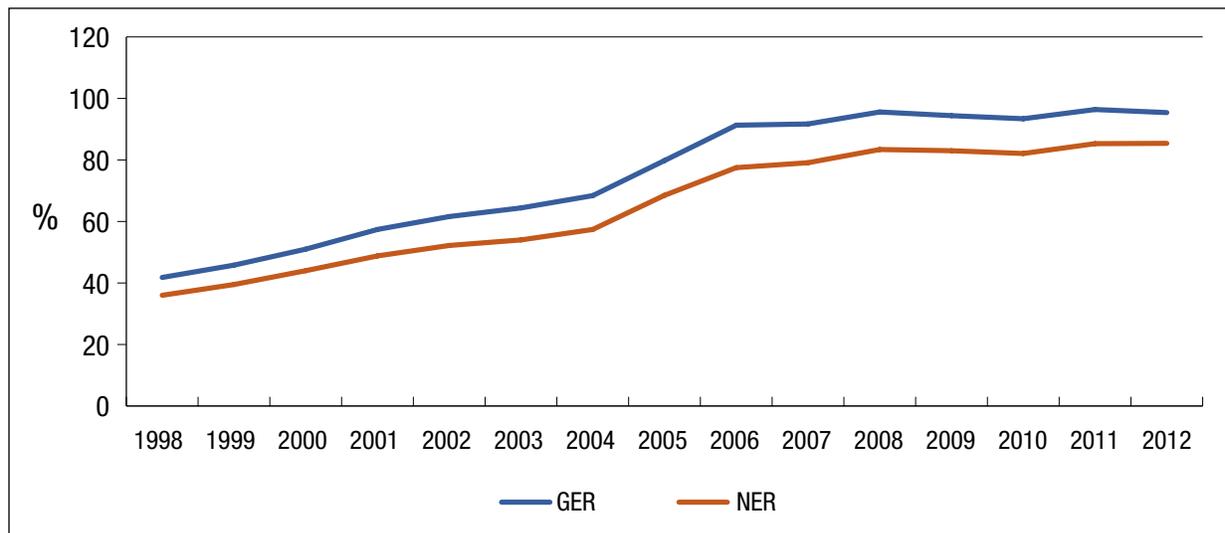
Building on sustained economic growth and a strong determination to reduce poverty, the government has invested heavily in improving the country's education system. This investment has been guided by strong education sector plans, starting with the Education and Training Policy in 1994 and evolving into a series of four comprehensive Education Sector Development Programs (ESDPs). The ESDPs are sectorwide plans that use a program approach to allocate resources. They are developed through a participatory process involving all levels of governance in education—federal, regional, and woreda levels—as well as development partners. The plans are monitored through Joint Review Missions, Annual Review Missions, and the Annual Education Conference, which bring the government, development partners, and representatives of other key stakeholders together to monitor and evaluate the implementation of the ESDPs. This promotes common acceptance of the impediments to implementation and solutions to overcome them.

Since the beginning of ESDP I, several important policies to increase access and improve quality have been developed and implemented. Under the decentralized governance process, these initiatives involved both federal and regional governments. They include incentives to parents to bring children at age seven for admission to grade 1; policies focused on the reduction in the dropout rate, with special attention to grade 1; pragmatic student promotion supported by continuous assessment; promotion of alternative

basic education (ABE) to bring overage, out-of-school children into the mainstream education system; school construction and promotion of at least one school in each kebele (the lowest administrative unit); targeted interventions to reduce student/textbook, student/teacher, and student/section ratios; community participation in school planning and management; direct transfers of funds to schools through the school grants program; and decentralization of the governance of the education system.

Ethiopia’s commitment to education, as reflected in the ESDPs, is also evident in its spending on education, which increased from 11.3 percent of its national budget in 1999–2000 to over 25 percent, or approximately \$1.4 billion, in 2010–11 (World Bank 2012c). By investing a growing share of its own resources, the government supported an increase in the number of schools from nearly 11,000 to over 31,000; the number of classrooms from nearly 72,000 to nearly 300,000; and the number of teachers from over 105,000 to about 321,000 between 1999–2000 and 2011–12 (EMIS 2000, 2012).

FIGURE I. NET ENROLLMENT RATE (NER) AND GROSS ENROLLMENT RATE (GER) FOR PRIMARY EDUCATION, 1998–2012



Source: EMIS 2012

These investments have led to an unprecedented expansion of access to primary education.¹ Since the first five-year ESDP was launched in 1997, there has been a dramatic increase especially in primary school enrollment. The target set for ESDP I of raising enrollment from 3.7 to 7 million was surpassed, with enrollment reaching 8.1 million in 2000/01. This trend continued throughout the duration of ESDP II (2000/01–2004/05), ESDP III (2005/06–2010/11) and ESDP IV (2010/11–2014/15), with primary enrollment reaching about 16.99 million in 2011/12. The net enrollment rate (NER) for primary grades 1–8 expanded from 24.9 percent in 1996/97, the base year of ESDP I, to 85.4 percent in 2011/12 (see figure I). It also increased at a slightly faster pace than the gross enrollment rate (GER), indicating that the demand from overage children for primary education is declining. Much progress was also made improving gender equity in education. The Gender Parity Index (GPI) improved significantly, from 0.67 to 0.95, between 1996/97 and 2011/12 (EMIS 1997, 2012).

Table I summarizes relevant statistics that provide a profile of the performance of the education system in Ethiopia starting in 1996/97, the base year for ESDP I, and at five-year intervals.

TABLE I. PERFORMANCE OF THE ETHIOPIAN PRIMARY EDUCATION SYSTEM BETWEEN 1996 AND 2012

Indicators	1996/97	2001/2	2006/7	2011/12
Enrollment in million	4.47	8.14	14.01	16.99
Gross enrollment rate, GER (girls)	35% (26%)	62% (51%)	92% (85%)	95 (93%)
Net enrollment rate, NER (girls)	25% (20%)	52% (45%)	79% (76%)	85% (84%)
Gender Parity Index	0.67	0.76	0.89	0.95
Total number of teachers (% female)	105,788 (26%)	126,882 (31%)	225,319 (37%)	321,894 (37%)
Pupil/teacher ratio (regular)	42	63	59	50
Grade 1–8 repetition rate (girls)	10%	9%	6% (6%)	9% (8%)
Grade 1–8 dropout rates (girls)	12%	18% (17%)	12% (12%)	16% (15%)
Grade 1 dropout rates (girls)		28%	18% (18%)	25% (24%)
Grade 5 primary completion rate* (girls)	46% (45%)	38% (38%)	67% (62%)	74% (73%)
Grade 8 primary completion rate* (girls)	37% (36%)	27% (28%)	45% (37%)	52% (52%)

(*)For 1996/7 and 2001/2 completion rates are unavailable. Survival rates are provided.

Source: EMIS (2012), Education Statistical Abstracts published by the Ministry of Education

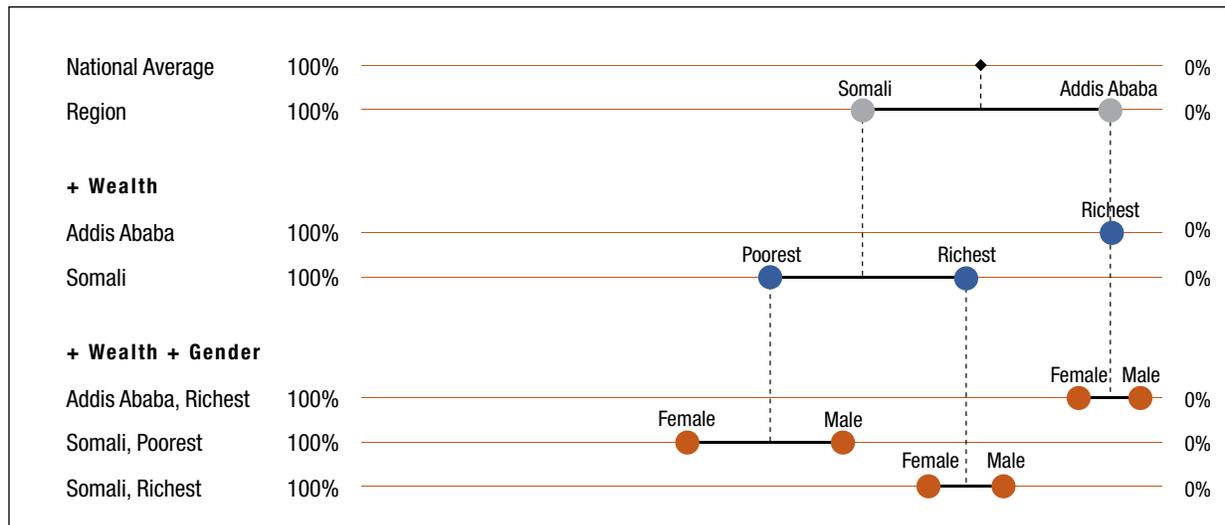
I.2 The Challenges of Equity, Quality, and Completion

To reach the goal of universal good-quality primary education, Ethiopia will need to continue tackling three related challenges: disparities in education, poor quality and learning, and high repetition and dropout rates.

Out-of-School Children and Equity in Access to Primary Education

Ethiopia has made robust progress toward reducing the size and share of the primary-school-age out-of-school population. However, about 3 million primary-age children remain out of school (UNICEF 2012). Enrolling these remaining children will require addressing challenging and often overlapping regional, income, and gender disparities. For example, the percentage of children age 7–16 that have never been to school is significantly higher among poor female children in the Somali region than among children in other regions, and gender or income groups (see figure 2).

FIGURE 2. AGE 7–16 CHILDREN WHO HAVE NEVER BEEN TO SCHOOL DISAGGREGATED BY REGION, INCOME, AND GENDER



Source: WIDE database based on Ethiopia DHS 2011

A significant number of out-of-school children are from emerging regions (Somali, Afar, Benishangul-Gumuz, and Gambella) where most pastoralist and semipastoralist groups in Ethiopia are located. The Afar and Somali regions, in particular, while making progress in getting children to school, are struggling to reach the same levels of enrollment as the rest of the nation. GERs stood at 75 percent in Somali, and 43 percent in Afar in 2011/12, up from 10 percent and 11 percent, respectively, in 1999/00 (EMIS 2000, 2012). It should be noted, however, that even though Afar and Somali have low GERs, they exhibit relatively good GPI ratios. GPIs in Afar (at 0.96) and Somali (at 0.91) are close to the national average of 0.94. Another encouraging sign is that the gross intake rate for the Afar and Somali regions was 135 percent and 120 percent, respectively, in 2011/12. Maintaining these levels in the future will be essential for these two regions to catch up with the rest of the nation (EMIS 2011).

Regional disparities are further exacerbated by income and gender disparities. The poorest children are three times more likely to be out of school than children from higher-income households. Notwithstanding the significant progress in gender equity indicators, primary-school-age girls are more likely to be out of school than boys in Ethiopia. The out-of-school rate for primary-age boys is 10 percent, compared with 16 percent for girls (UNESCO Institute for Statistics calculations, based on DHS 2011 data). The gender difference increases with age. There is also a recognition that dimensions of gender equity will need to be widened to consolidate the gains in GPI. They should include equitable access to school resources; equitable opportunity to participate in classroom discussions, extracurricular activities, such as sports and school clubs; and equity in the application of school rules and regulations.

While the government is continuing to push at the national level to sustain the gains achieved in access, a heightened effort is needed to target disadvantaged regions and communities to bring them to parity with the rest of the country. The emerging regions vary in their education development indicators and

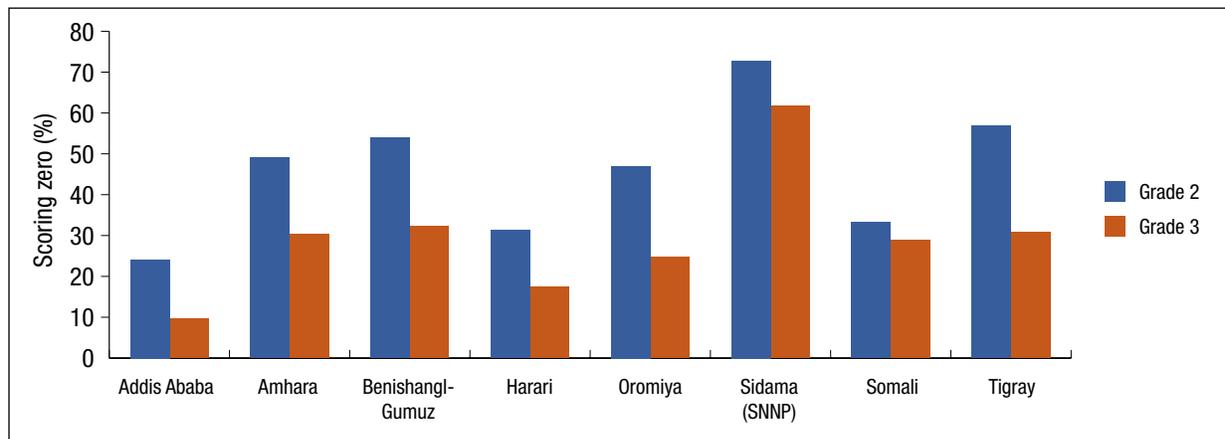
their underlying causes. Region- and community-specific policies and programs will need to be developed based on an objective analysis of the causes contributing to lower achievements.

The Quality of Education

Despite best efforts, the astonishing increase in enrollment has overwhelmed the ability of the system to deliver quality. As may be expected, student achievements declined during the period of expansion. The composite score for learning achievement in grade 4 fell from 48 percent in 2000 to 41 percent in 2007, though it has remained relatively flat since. The score stood at 40 percent in 2012, which suggests that the quality improvement efforts put into the system may be starting to arrest the decline in quality in the first cycle. The composite score for grade 8 declined from 43 percent to 40 percent between 2000 and 2007, well below the required levels, and has continued to decline in the past five years. It stood at 35.3 in 2012 (NEAEA 2003a, 2003b, 2008a, 2008b; MoE, n.d., a, n.d., b). This suggests a more limited impact or at least a lagged effect of quality improvement efforts in the second cycle. The student/teacher ratio increased from 42 to 50, and the student/section ratio has not shown any appreciable change remaining at about 57 between 1996/97 and 2011/12 (EMIS 1997, 2012).

Disappointing outcomes are also found in individual areas of competency. Despite the progressive language policy adapted in the primary schools of Ethiopia, the results of an Early-Grade Reading Assessment (EGRA) in 2010 confirm continued low achievement levels in reading. An estimated 80 percent of students were not reading at the expected oral fluency rate in their mother tongue, and rural girls consistently performed below boys. There were also significant regional disparities. For example, the percentage of students who could not read a single word of a story in grade 2 ranged from 27.5 percent in Amhara to 69.2 percent in SNNP. The situation was slightly better in Harari and Addis Ababa, where, respectively, 17.8 and 10.1 percent of grade 2 children were unable to read. These nonreaders are likely to drop out from school. In addition, more than 50 percent of the grade 2 children in the regions could not even comprehend what they were reading (see figure 3). Even in the urban regions such as Harari and Addis Ababa, one quarter or more of children could not comprehend basic questions (Piper 2010).

FIGURE 3. PERCENTAGE OF CHILDREN SCORING ZERO ON READING COMPREHENSION



Source: Piper 2010

The government recognizes that gains in access are of little meaning if they are not accompanied by improved student learning. If students do not acquire significant knowledge and skills, Ethiopia will not be able to compete within a global economy. The government is therefore placing a strong emphasis on quality concerns in general and on those inputs and processes that translate more directly into improved student learning and will help schools become genuine learning environments (e.g., quality-focused school supervision, internal school leadership, increased student participation, school-community partnerships) (MoE 2010). In 2008, the government launched the first phase of the General Education Quality Improvement Project (GEQIP), which aims “to improve the quality of general education (grades 1–12) throughout the country” (MoE 2012). In addition to the National Learning Assessments being carried out every four years at grades 4, 8, 10, and 12, Ethiopia will also join regional and international learning assessment organizations to determine the status of the quality of its education as compared with other countries’, and to gauge its international competitiveness.

Dropout, Repetition, and Completion Rates

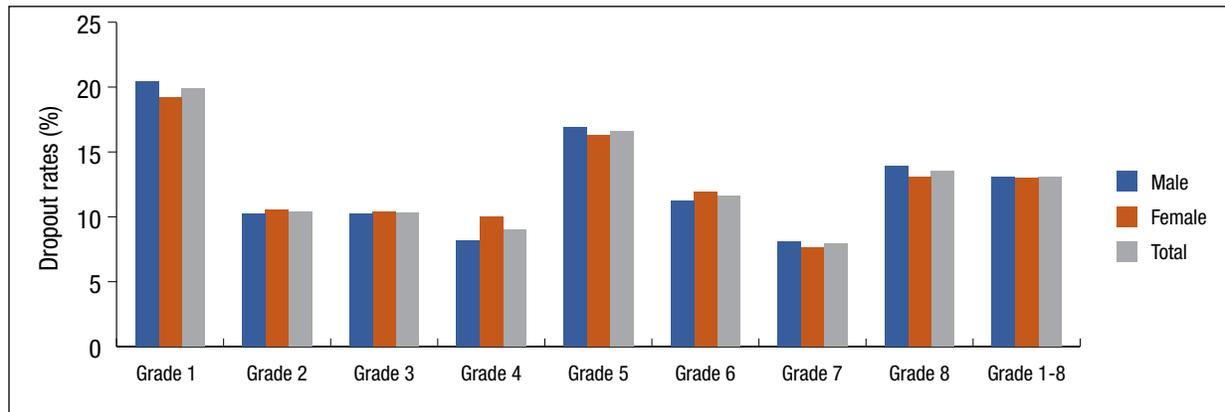
The quality challenge is closely linked to the challenge of completion and dropout. Despite impressive improvements in providing access to schooling, the Ethiopian education system has struggled with high dropout and repetition rates and, as a result, low completion rates. Dropping out is particularly high in the early primary grades. The national grade 1 dropout rate stood at 28 percent in 2000/01 and 25 percent in 2011/12. In other words, more than one-fourth of the children who entered grade 1 during the 2011/12 school year did not remain in school until the end of their first year of schooling. This highlights the need to focus on survival beyond grade 1 and work on expanding early childhood education, which helps prepare children for primary school and which is currently very scarce (EMIS 2001, 2012).

Dropout rates also vary significantly across regions. Between 2006/07 and 2009/10, the average dropout rate across grades 1 to 9 in rural areas was twice as large as in urban areas. While the overall rural dropout rate is declining, in some regions, like the pastoralist Afar region, the rates are particularly severe. In Afar, the grade 1 dropout rate in 2009/10 was 36 percent, far above the national average of 22 percent (Jennings & Poppe 2012).

Dropout rates are relatively lower in higher grades, although grades 5 and 8 are also pressure points (see figure 4). Completion rates in higher grades have also shown slight improvement. Between 2006/07 and 2011/12, the grade 5 completion rate increased from 67 percent to 74 percent and the grade 8 completion rate improved from 45 percent to 52 percent (see table 1).

Dropouts and repeaters consume scarce resources of the education system, such as teachers, classrooms, and textbooks. Internal efficiency calculations for 2007/08 show that over half of the resources are being allocated to pupils who will drop out before completing eight years of primary school (Ravishankar et al. 2010). The annual financial cost incurred by the education system to support potential dropouts and repeaters in primary classrooms is huge. One study estimates this cost to be approximately Birr 8.9 billion, or \$500 million (Bastian 2004).

FIGURE 4. DROPOUT RATES IN PRIMARY (1–8) BY GRADE, 2010–11



Source: EMIS 2011

There are some known elements of what will lead to fewer dropouts. Schools with full class days instead of shift system schools, evening schools (although this is rare), high-quality teachers, small pupil/teacher ratios and large textbook/pupil ratios correlate with lower dropout rates. In the emerging regions, qualified teachers, high textbook/pupil ratios, smaller pupil/teacher ratios, and lower pupil/section² ratios and higher female teacher ratios have a positive impact on having students drop out less often (Jennings & Poppe 2012). Dropout and repetition rates are both the causes and the results of the poor quality of education. As long as the quality of primary education remains low, dropout and repetition rates will continue to plague the education system.

2. Barriers and Bottlenecks Slowing Progress on Access and Learning

Ethiopia's remarkable progress toward achieving universal primary education over the past two decades has been driven by a number of factors, the most significant being a sustained government-led effort to increase access to education. Building on strong economic growth and a peace dividend, the government, with support from its development partners, invested heavily to improve access to education by increasing expenditures on school infrastructure, and hiring and training thousands of teachers, administrators, and officials. Abolishing school fees and raising awareness of the importance of education through community programs alleviated economic and sociocultural constraints. These measures were complemented by an increased devolution of power to federal regions through a gradual decentralization of the education system to lower levels of administration. These investments form a core element in a long-term strategy to address the country's poverty and inequality, which had been a source of instability for decades (Engel & Rose 2011).

As Ethiopia inches closer to reaching the goal of universal primary education, the remaining barriers and bottlenecks, which are in some cases more challenging than in earlier periods, will need to be addressed. Progress in the past five years has already proven to be more difficult than in the previous half decade. Between 2006/07 and 2011/12, NER increased from 79 percent to 85 percent, a mere 6 percent, while during the previous five-year period NER increased by 27 percent (EMIS 2007, 2012). This is to be expected. As the education system gets closer to universal enrollment, the children (and families) remaining outside the system will require stronger persuasive arguments and incentives to join. The many barriers and bottlenecks that prevent out-of-school children from enrolling will need to be mitigated. The most important are economic and sociocultural factors affecting demand, supply-side factors, and governance, capacity, and finance.

2.1 Economic and Sociocultural Factors Limiting Demand

Poverty and Opportunity Costs

Though the number of people living in poverty has substantially decreased in recent years, it is estimated that about 30 percent of the Ethiopian population still live in poverty (World Bank 2012b). The Ethiopian Demographic Household Survey (DHS) identified a strong relationship between household economic status and schooling at the primary and secondary levels. Field research across all regions reaffirms that household poverty is a major factor affecting the enrollment of children. Even though primary education is free in Ethiopia, parents do not enroll their children because they are unable to cover the indirect costs of education, including clothing, educational materials, food, and other essential items (Jennings et al. 2011). The nomadic lifestyle of poor pastoralist communities has also meant that their children are unable to attend school regularly and ultimately drop out.

Besides the direct costs, the opportunity cost of education is also an important deterrent. Many children do not attend school because they are engaged in income-generating activities. Child labor is one of the major impediments affecting school attendance. Data from the 2005 Ethiopian Young Lives survey show that almost one-quarter of all the children surveyed were involved in labor activities, averaging almost six hours of work per day. As a result of this work burden, many were unable to spend sufficient time on homework, which had an impact on their ability to keep up and attend school (Woldehanna et al. 2005). A 2010 UNFPA study of children in seven regions confirms these results, showing that 12 percent of the children surveyed were not able to attend school and 22 percent were forced to stay out of school because they were engaged in child labor (Population Council & UNFPA 2010).

The Ethiopian government has implemented a number of initiatives to address economic barriers to access to education. One of the first main initiatives under the Education and Training Policy was to abolish school fees. The Productive Safety Net Program, introduced in 2005, also had a positive impact on education. Data from a 2006 survey indicate that 15 percent of cash transfers were used for education. Half of the households interviewed reported keeping their children in school longer, and one-third enrolled more of their children in school (UNESCO 2010). By 2008, spending on education was the most common type of spending of program resources. An independent evaluation concluded that the program “could improve child schooling and reduce child labor provided that the transfers are large enough” (Hoddinott, Gilligan, & Taffesse 2009, 21). In addition to providing financial incentives, the government has also tried to reach children from the poorest and remotest communities through ABE programs and experimentation with mobile school programs, supplemented with boarding facilities. A national strategy for ABE has been in place since 2006 (MoE 2006). Further scaling up and improvement in flexible programming and targeting of the most disadvantaged to address economic barriers will be needed to make additional progress.

Sociocultural Factors

In addition to economic factors, a number of sociocultural factors constrain access to education in Ethiopia. Overall attitudes toward education are often a barrier. A recent survey of young adults in seven regions showed that family disapproval was one of the main reasons for not attending school (Population Council & UNFPA 2010). Children are also kept from attending school because of harmful traditional practices, sexual and domestic violence, and early marriage (UNICEF 2012).

Early marriage is a particularly significant factor in low female enrollment and leads to the dropping out of girls in remote areas. It is often considered as a more effective and valuable solution to food insecurity than education, offering instant benefits in terms of ties with other families that will provide in times of food shortage. Though law prohibits early marriage—18 is the minimum age for marriage in Ethiopia—these practices continue to occur in a systematic way. In South Omo, for example, early marriage is practiced from the age of five. The boy’s family will pay a “bride wealth,” or *koyta*, over an extended period of time, while the girl’s family keeps the girls safe and away from “modernity;” hence, she does not attend school (Jennings 2011). Over 60 percent of the girls who get married early never enter school. Approximately 17 percent of the girls who were subjected to early marriage dropped out of primary school (Population Council & UNFPA 2010).

2.2 School Infrastructure, Teachers, and Tools

The Ethiopian educational system has gone through a massive expansion in recent years. However, shortages in appropriate facilities, education tools, and qualified teachers are constraining the further consolidation and expansion of enrollments and the improvement of learning outcomes. These problems are particularly severe for children in poor and remote communities and for children with special needs.

School Infrastructure

Classroom construction, including Alternative Basic Education Centers (ABECs), has been a central element of the national strategy to accelerate progress toward universal primary education (MoE 2010). Capital spending on infrastructure for general education increased by approximately 20 percent between 2003/04 and 2007/08, and the number of classrooms in operation increased by over 140 percent between 1996/97 and 2008/09 (Ravishankar et al. 2010). Nonetheless, the quality of school infrastructure and resulting distance to school, particularly in emerging regions, remains a major factor that prohibits parents from sending children to school. A UNFPA study indicates that 17 percent of children surveyed across seven regions could not attend school and 3 percent were forced to leave school due to school distance (Population Council & UNFPA 2010). While pupil/section ratios (PSRs) have improved over recent years, they continue to be high. The national PSR was 57 in 2010/11, which is 7 points higher than the national target of 50 pupils per section set by ESDP III (EMIS 2011).³ Regions with the highest PSR are Oromiya, Somali, SNNP, and Gambella. Moreover, schools, in particular at primary levels and in remote rural regions, are often constructed with nondurable materials (mainly through community support) (MoE 2010). Many schools are also missing adequate sanitation facilities, and the lack of separate toilets for girls has been found to be one of factors contributing to absenteeism and school dropout rates among girls. In facilities for primary grades 1 to 8, only 34 percent of schools have water and nearly 10 percent lack latrines (EMIS 2011).

Teaching Tools

A significant number of schools, teachers, and students, especially in the more remote rural regions, do not have the basic materials for the delivery of good-quality education to be possible (MoE 2010). Ethiopia is striving to achieve a student/textbook ratio of 1:1, and the GEQIP Phase I program emphasized the supply of textbooks for both primary and secondary school levels. Shortages of reading materials and textbooks continue to exist, however, and vary significantly across regions, affecting student achievement (MoE 2008). The recent EGRA study showed only 65 percent of children in Sidama and 70 percent of children in Amhara had a textbook. Only one in six children in Oromiya, Somali, Benishangul-Gumuz, and Sidama had access to any other reading materials (EGRA 2010). Within the recurrent expenditure budget, pressures to address teacher shortages are squeezing the space for nonsalary expenditures, including for textbooks and other reading materials. Enhancing the share of nonsalary recurrent spending would have a significant impact on completion rates and the reduction of dropouts (Ravishankar et al. 2010).

Teachers

An impressive number of teachers have been recruited in recent years, but the availability of qualified teachers remains a critical constraint to reach universal primary education and improve learning outcomes. Shortages of qualified teachers vary across regions and *woredas* but are particularly serious in some regions, especially Amhara, Oromiya, and SNNP, which together account for 90 percent of the short supply (Ravishankar et al. 2010). Poor qualifications are also further exacerbated by high levels of attrition.

Improving teacher quality is a critical challenge to improve learning outcomes (di Santiago 2005). ESDP IV identifies several challenges related to the development of the teacher force, both preservice and in-service (MoE 2010):

- Weak teacher training and qualifications at primary and secondary levels;
- Weak institutional and management capacity at the institutional level;
- Shortages of female candidates and candidates from rural areas and indigenous groups in pre-service training;
- Insufficiently qualified teachers for mathematics and science;
- Weak quality of preservice training due to a lack of good-quality teaching materials and inadequate practical training and teaching methods;
- Insufficient attention to continuous professional development; and
- Shortages of females in leadership positions.

Financed under GEQIP Phase I, Ethiopia increased the level of training required by teachers. The training required to teach at the primary first cycle (grade 1–4) increased from a one-year certificate program to a three-year diploma program. Approximately 55 percent of the teachers hold diploma qualification. An extensive upgrading program to bring teachers up to the required level of qualification is under way. Similarly, the level of training required by head teachers is under review, and in-service training is planned for education leaders (MoE 2012). Even after all these efforts, however, Ethiopia still faces a shortage of good-quality teachers to achieve universal quality education for all. First, more teachers are needed to reduce the teacher/student ratio within the current school population and thus to contribute to improving the quality of education. Second, additional teachers are needed to cater to the remaining out-of-school children and bring them into the mainstream education system.

2.3 Governance, Capacity, and Financing Barriers

Ethiopia has a three-tiered federal system of government that is strongly decentralized. There are 9 regional states, 2 chartered city administrations, and over 900 *woredas*. Each level of government has clearly defined responsibilities, where the MoE enacts policy and leads the sector while the regions and *woredas* take on more operational responsibilities. Budgetary support is provided from the federal government.

Planning, Budgeting, and Management

Since the beginning of the ESDPs in 1997, the planning, budget, and management processes have been continually refined to meet the needs of the decentralized education system. *Woredas* are ultimately responsible for the planning and budgeting of general education within their territories. The government transfers funds to the regional and *woreda* levels in the form of block grants based on a formula that includes the size of the population and the level of development. The MoE provides technical guidance to the regional education levels to plan and implement the ESDPs and to enable linking between the national priorities and programs at the regional and *woreda* levels. In addition, capacity-building initiatives help at the regional and *woreda* levels.

However, many *woreda* offices do not yet have the capacity to exercise their responsibilities effectively. Decentralization, combined with the expansion of the education system, has required not only a larger number of professionals at different levels of governance but also greater managerial and technical skills. School management also needs further improvement. Efforts to address shortages have been made more difficult by frequent staff turnover. Informal estimates show that there is an annual turnover of approximately 20 to 25 percent of the personnel at the *woreda* level.⁴ Isolated training courses have not succeeded in overcoming these challenges and have not translated systematically into improved work practices. School cluster resource centers need to be strengthened as entry points for capacity development at the local level. Under ESDP IV, more comprehensive capacity development programs will be developed, aiming at improving the functioning of offices at all levels, including cluster resource centers and schools. This will include a greater focus on leadership training. For example, GEQIP Phase 2 includes a capacity-building program for managers and education leaders at different decentralized levels of the education system (MoE 2012).

Programs to improve management capacities need to be accompanied by legal instruments to clarify the rights, duties, and responsibilities of all parties, including government organs, citizens, communities, and institutions.

Information Collection, Analysis and Monitoring

A strong information collection and analysis system, called the Education Management Information System (EMIS), exists at the federal and regional levels, and efforts are being made to further decentralize this system by making data-processing and -analysis functions a responsibility at the *woreda* level. This will enable *woredas*, and schools in the *woredas*, to have easy accessibility to the data and to use data for planning and monitoring. A school report card system is also being piloted and, if found successful, will be launched across the nation. These school report cards will enable school management committees to strengthen the development, implementation, and monitoring of school improvement plans.

The EMIS needs to be further strengthened to help Ethiopia address its outstanding challenges. First, the system needs to pay greater attention to equity issues. Data and analysis play a role in creating greater awareness of interregional and intraregional disparities for policy interventions and resource allocation.

Second, the collection and analysis of data on the characteristics of out-of-school children should be expanded in order to be able to more effectively target the unreached. Third, the EMIS should expand the scope of the data collection and analysis of the quality aspects of the education system. Incorporating these elements into the EMIS will require an expansion of the system as well as a professional reorientation and training of the EMIS personnel.

Financing Constraints

The Ethiopian government allocates a significant share of its budget to education. In 2011/12, education accounted for 25 percent of total public expenditures and 4.7 percent of GDP. However, despite this effort, the current allocations are insufficient to meet all the objectives laid out in the ESDP IV. The financing model for ESDP IV (2010–15) estimates a funding gap of birr 29 billion (\$1.9 billion) for the whole sector and birr 21 billion (\$1.4 billion) for primary education (MoE 2010). The latter is equivalent to the need for additional funding for the primary subsector of about \$280 million per year. Part of this funding gap has been met by GEQIP Phase 1 investments and it is expected that this will continue under GEQIP Phase 2. The \$550 million GEQIP Phase 2 (which covers primary and secondary education) is slated to start in July 2013 and is currently facing a financing gap of \$125 million for the 2013–17 period.

Within this context, current per-pupil spending is falling short of what is needed (World Bank 2012a, 2012c). The 2010 Ethiopia Education Public Expenditure Review (EPER) estimated that per-pupil recurrent expenditures are about birr 186, or approximately \$10 per year, and of this amount, only about \$1.5 per pupil is spent on anything other than salaries (Ravishankar et al. 2010).

The ESDP IV and EPER provide a number of suggestions with respect to how the funding gap could be addressed including a further increase in the share of education in the national budget, an increase in support from development partners and community contributions (for example for salaries of non-teaching staff or for construction of selected facilities), and a further acceleration of the growth scenario.

Domestic resources financed 82 percent of education expenditure in Ethiopia in 2008/09—76 percent public and 6 percent private and community contributions. External donor assistance and loans accounted for the remaining 18 percent. Spending from community contributions was primarily limited to school expansion and improvement, and these funds had an impact on learning. For example, the building of classrooms during the same period from these funds improved the pupil/section ratio from 75 to 65 in primary school.

The likelihood of additional resources being generated from an accelerated growth scenario seems limited. A mid-term evaluation of the Growth and Transformation Plan points at a slowing economic scenario. Although Ethiopia's average economic growth has been at about 10 percent over the past decade, recent growth has been slower. In 2011/12, the economy grew at 8.5 percent against a target of 11 percent. However, the education budget as a percentage of the total government spending stood at 25 percent, which is 8 percent above the target set for 2011/12. The slowdown in economic growth may suggest a “build up of vulnerabilities which need to be addressed in order to ensure strong, sustainable

and inclusive growth.” The gap between savings and investment is widening; and despite strong export performance, the trade deficit is increasing. The Ethiopian economy is also beginning to feel the impact of the very tight world economic scenario. This has prompted the Government of Ethiopia to take additional measures to address the financing gap of the GTP and education in particular (UNECA 2013).

In order to more efficiently allocate resources and meet the recurrent expenditures, the school grants program is being strengthened to provide funds to schools to finance school improvement plans. This conditional resource allocation method is working well, as audits show that school grants are used for the intended purposes and there is no evidence of misappropriation of funds (Audit Services Corporation 2012; Ravishankar et al. 2010; World Bank 2012b). To ensure that government funds are not replaced by external funding, the EPER recommends that non-salary recurrent spending from external support should be conditional on the *woreda* being responsible for resource allocation. In sum, conditional grants over time alongside mandatory budget allocations for non-salary school expenditures could be a long-term sustainable strategy to eventually rectify Ethiopia’s funding barriers and accelerate growth (Ravishankar et al. 2010).

Details with regard to the financing of the proposals set out in the remainder of this paper are presented in sections 3 and 4. A number of the proposed programs represent priorities set out in ESDP IV and GEQIP. However, the programs are not currently funded under either ESDP IV or GEQIP.

3. Solutions

The Learning for All Ministerial meeting in April 2013 aims to discuss concrete steps that will accelerate progress toward the Millennium Development Goals and the Education for All goals, and to reach a consensus on a program that will make contribute to accelerating progress in each participating country, with a time horizon of 2013 to 2015.⁵ In the case of Ethiopia, the meeting will be an opportunity to recognize the significant progress made and address outstanding challenges of equity, quality, and completion.

The development of the recommendations and proposals that are presented below has been guided by three simple principles. First, they aim to be consistent with and complement the current planning framework and priorities. Second, they seek to add value in terms of delivering tangible benefits and addressing key bottlenecks. Third, the proposed financing should be seen as additional, rather than a reallocation of the existing resource envelope. The financing provisions themselves are indicative rather than definitive. More detailed financing would be needed to move toward implementation.

The proposals aim to build on and add value to the following plans and programs.

Education Sector Development Program IV (2011–15). This program builds on the ESDP III. It lays out the national education policy framework and formulates priority action programs in general education, technical and vocational education and training, higher education, and a number of crosscutting areas (e.g. gender, special needs education). It also contains a detailed monitoring and evaluation framework and a financial framework.

General Education Quality Improvement Program (GEQIP) Phase 2 (2013–17). This program is designed to improve learning outcomes for over 20 million primary and secondary school students over 4 years from 2013–2017, and represents a further detailing and implementation of the ESDP IV objectives in this area. It consists of 6 components, addressing a number of domains of school effectiveness, including (1) curriculum, textbooks and assessments; (2) a Teacher Development Program (TDP); (3) a school improvement plan, and school grants; (4) management and capacity building, including EMIS; (5) the use of information and communications technology (ICT) for improving the quality of learning and teaching; and (6) coordination, monitoring, and evaluation. GEQIP Phase 2 does not include an infrastructure component or fund ongoing costs such as teacher salaries.

Promoting Basic Services Phase III (PBS 3) Project. This five-year (2013–18) project is designed to improve the quality of basic services, including education, by funding block grants. Primary education accounts for 53 percent of the \$600 million project.

While the actions proposed below strongly build on and incorporate key aspirations of ESDP IV and GEQIP 2, they are not currently funded under either programs. The proposals highlight areas where priority action is needed to accelerate progress towards the education Millennium Development Goals and Education for All goals. They provide concrete solutions to reach and provide access to the remaining out-of-school primary-school-age population and to retain the children as long as possible within the school system.

Proposal 1: The Last Mile: Reaching the Unreached

Children affected: 3 million out-of-school children

Total annual cost: \$243.9 million

The proposal focuses on reaching the remaining 3 million out-of-school children by bringing them into the school system through a combination of demand- and supply-side interventions. Ethiopia's concerted and nationwide efforts to build schools, train teachers, provide economic incentives, and raise awareness have been successful in providing access to a great number of children. It is clear, however, that reaching the final group of "unreached" children will require a dedicated effort with flexible solutions focused on the areas where these children are concentrated. More than 90 percent of these children are located in five regions, two of which are emerging regions (Afar and Somali); see table 2.

TABLE 2. PERCENTAGE OF OUT-OF-SCHOOL CHILDREN (OOSC) OF PRIMARY AND LOWER SECONDARY AGE BY REGION

Region	Percent of OOSC in Primary Age	Number of OOSC in Primary Age
Tigray	5.2	49,402
Afar	69.6	228,522
Amhara	5.0	184,513
Oromia	21.7	1,396,848
Somali	53.9	561,573
Benishangul-Gumuz	8.8	13,791
SNNP	12.3	440,693
Gambella	10.1	7,226
Harari	18.0	6,832
Addis Ababa	22.4	106,903
Dire Dawa	27.1	19,047
Total	17.8	3,015,350

Source: EMIS 2010

The proposal includes four components, all of which would contribute to the achievement of the ESDP IV targets to achieve universal primary education, but currently remain unfunded. The degree to which each of these needs to be implemented will depend on the region considered. Depending on resources

available these programs could be rolled out in those regions with the highest out-of-school populations. It should also be noted that the success of these programs will be determined by the degree to which they are able to adapt to the unique circumstances in the regions and can interact with existing programs. For example, in addition to the proposed community mobilization program, continued cash incentives (through the Productive Safety Net Program) will be needed to alleviate demand-side barriers.

The Community Mobilization Program

This program would build on existing initiatives and establish a coalition of community leaders, representatives of civil society organizations, teachers, school management, and educators (MoE 2001). The coalition would help identify children belonging to different groups of out-of-school children; create community awareness about the need to reach these children through provision of appropriate education tailored to their circumstances; and work to persuade parents to enroll their children in the nearest schools. The coalition would work with school management and teachers to develop a positive school environment through the provision of special support to these children and to allocate available resources to meet the needs of these children. The coalition would also work with school management to identify students who exhibit tendencies associated with drop out and to take preventive measures with the support of parents, teachers and school management to keep them in school.

Many successful, isolated instances of such interventions exist within Ethiopia and other parts of the world. These models of interventions need to be documented and disseminated to the communities. A manual of operations for the successful functioning of the coalition will be developed. Based on this, a training and communication program will be developed and implemented targeting the members of the coalition. The program would complement existing community mobilization programs and school improvement programs aimed at improving the school environment by providing information about the causes of dropping out and the needs of high-risk out-of-school children. The program would start on an experimental basis with close supervision and monitoring and would be expanded in stages. If feasible, a connection would be established between this program and ongoing cash transfer and school feeding programs to target incentives to families with out-of-school children by reducing economic barriers to schooling.

Estimated cost: Assuming a unit cost of \$1000 per community, the program could be rolled out in 2,000 communities (*kebele*) for \$2 million.

School Construction Program

Despite significant efforts to increase the supply and quality of school infrastructure across the country, more resources will be needed to provide adequate infrastructure for the remaining 3 million out-of-school children. With already high pupil/classroom and pupil/section ratios, it is clear that Ethiopia will need to construct additional schools to accommodate at least 2.64 million children (excluding 360,000 children who have dropped out). Many of these children are located in emerging regions, where community contributions, commonly used as a complement to capital budget resources to expand and improve in-

frastructure, are likely to be much more limited (Ravishankar et al. 2010). The type of infrastructure will differ depending on the location and the social and educational support needed for the children to persist in schools, but could include ABECs, the transformation of ABECs into regular schools, constructing new and expanding existing primary schools, opening mobile schools (for pastoral children), and opening and expanding boarding and para-boarding schools (for girls and children in pastoral and semipastoral areas). In line with the recommendations of the EPER, investment in school construction, in particular in remote regions, should be complemented by an evaluation of its impact on school attendance and a review of education targets for these regions.

Estimated cost: The provision of education to the current out-of-school population would require constructing 52,800 additional classrooms (including furniture). This would cost \$528 million over the 2013–15 period.⁶ The cost of setting up 100 mobile schools for pastoralist children is estimated at \$2 million, bringing the total cost of the program to \$530 million. The Government of Ethiopia would fund the bulk of this program from its own resources. The government's request for donor support is for one-fourth of the total infrastructure cost proposed which amounts to \$132.5 million. Construction of primary schools is the responsibility of the regional education bureaus and the *woreda* education offices. A clear organizational structure and implementation modalities exist at these levels to fund and monitor the quality of school construction.

Increasing the Teaching Force to Reach Out-of-School Children through Preservice Training

Given the already high teacher/student ratio, more teachers will be needed to cover the out-of-school population. The proposal would add to the government's ongoing efforts to improve the teaching force. In an effort to improve the quality of teaching, Ethiopia is upgrading the minimum qualifications required to teach at the primary level from a one-year certificate level to three-year diploma level. A massive upgrading program is underway to meet the requirements. In addition, a teacher licensing and relicensing program is being designed and implemented. Much of this effort is supported by development partners through the GEQIP Phase 2 program. While critical, this effort does not cover the need for additional teachers to teach the current 3 million out-of-school children.

Estimated cost: The provision of primary education to 3 million out-of-school children will require an additional 52,800 additional diploma-level teachers. The unit cost of training a diploma teacher is estimated to be \$1,500. Thus the total cost of training 52,800 additional diploma level teachers required to cover the out-of-school children is \$79.2 million. It should be noted that the cost of salaries for the additional 52,800 teachers recruited over the 2013–15 period in a staggered fashion is estimated to be \$105.6 million. The salary cost would be borne entirely by the Government of Ethiopia.

Teaching Tools

Ethiopia is closely approaching its policy target of providing core textbooks to primary students at 1:1 ratio. GEQIP I implemented a massive curriculum revision and textbook development and distribution program, which will continue into GEQIP Phase 2. Current provisions within the government’s budget and GEQIP Phase 2 are not sufficient to supply textbooks for the remaining out-of-school children.

Estimated cost: It is estimated that on the average it will cost \$5 per primary school student to provide the core textbooks and the teacher guides. Provision textbooks at 1:1 ratio to all out-of-school children once they enroll in school will cost \$15 million.

Total estimated cost of proposal 1:

TABLE 3. ESTIMATED COST OF THE TARGETED PROGRAM “REACHING THE UNREACHED,” 2013–15 (MILLIONS OF DOLLARS)

	Annual Cost*	Total Cost	Government of Ethiopia	Development Partners
Community mobilization	0.67	2		2
School construction	176.7	530	397.5	132.5
Preservice teacher training	26.4	79.2		79.2
Salaries of teachers	35.2	105.6	105.6	0
Teaching tools	5	15		15
Total	243.9	731.8	503.1	228.7

Note: Proposed sharing: Ethiopian government, 63 percent; development partners, 27 percent

*Assumes three tranches, one in each of the program years (2013-15)

Proposal 2: Tackling the Dropout Rate through Quality Improvement—Filling Gaps

Beneficiaries affected: 68,000 teachers; approximately 6.5 million children; up to 50 percent of schools

Estimated annual cost: \$19.2 million

This proposal is focused on reducing the dropout rate of existing primary school students. It would strongly contribute to the ESDP IV targets and builds on the strong foundation provided by the ongoing GEQIP. However, the proposed program is not currently funded by either programs.

In-Service Teacher Training for Early-Grade Reading Teachers

The EGRA study referred to earlier in this paper accurately highlights the potential link between poor reading and comprehension achievements by students in early grades and the tendency to drop out. The ability to read and comprehend is a prerequisite for adequate performance by students in other subjects

and thus for their successful performance in the school system. After a thorough analysis of the status of the professional preparation of the early-grade teachers, the EGRA study recommends an in-service training program for all early-grade teachers. Early-grade reading training is not currently included in the GEQIP; however, a model for this training exists. USAID, through its Improving Quality of Primary Education Project (IQPEP), designed and implemented an in-service training program for early-grade teachers in reading and comprehension. The IQPEP included developing modules for use by teachers and trained master trainers from approximately 250 project schools (USAID 2009). This training program can be expanded to a national level program to cover all early-grade teachers for grades 1 and 2. The total number of teachers who will receive training is estimated to be approximately 68,000 during the two years between 2014 and 2015. Potentially, close to 6.5 million children in grades 1 and 2 could benefit from improved reading and comprehension skills beyond the 2013–15 period of interventions. It is recommended, before scaling up the program to the national level, to conduct a comprehensive evaluation of the IQPEP to refine the program and build on lessons learned.

Estimated cost: The estimated cost to evaluate and scale the program at the national level is \$10 million.

Results-Based School Grant Program

In addition to increasing overall levels of quality, reducing dropouts will require focusing attention on those children who are likely to drop out. The Results-Based School Grant Program would aim to extend the existing School Grant Program with performance-based grants. The program would provide incentives for schools in the form of additional school grants linked to the school's performance in terms of reducing dropout rates and including children of special needs. In 2012/13, \$65 million was allocated and distributed as school grants. In addition, a one-time additional grant of \$17.5 million was distributed, thus making the total value of existing school grants \$82.5 million. The additional funding linked to school performance could be used to hone facilities, learning tools, and teaching methods to needs of potential dropouts and special needs children.

Estimated cost: The proposal includes providing an additional \$15 million of school grants per year over the 2013–15 period as incentives. This is approximately one-fourth of the current value of the School Grants Program. Detailed formula for allocation of the school grant incentive to schools would need to be further worked out. Depending on the criteria, the program could potentially affect up to 50 percent of schools. The total school grants incentive for the 2013–15 period would be \$45 million.

ICT Program: Building on GEQIP 2 to Reach Older Out-of-School Children and Primary School Teachers

Information and communications technology allows for new and innovative ways to address access to quality learning and education management. The use of ICT for teacher training greatly increases the opportunities for structuring both pre- and in-service teacher training with greater efficiency. The Ethiopian government identified ICT as a key enabler for economic growth and improvement in the access and

quality of its education system. In order to have a more coordinated, formalized approach to effectively and efficiently manage ICT integration into the education system, the MOE, through its Center for Education and Information and Communications Technology, developed a road map to utilize technology to improve the learning process. The government has heavily invested in the ICT infrastructure and has supported the integration of ICT into teaching and learning in ESDP IV and GEQIP Phase 2.

Through the GEQIP Phase 2, at least 200 secondary schools will have the necessary infrastructure and the professional capacity to apply ICT for teaching learning purposes. During school hours, it is expected that this infrastructure will be fully utilized. However, outside normal school hours and during holidays, the resources present an opportunity for wider community use, including by older out-of-school children and primary school teachers. The proposed program could harness this opportunity by developing informal education materials for older out-of-school children and other participating community members, including teachers. The program could start in 50 schools and eventually expand to include the communities surrounding the 200 secondary schools. It would be managed and supervised by designated facilitators.

Estimated cost: The government has allocated \$30 million for ICT textbooks for secondary education for two years under GEQIP 2. The government will be responsible for the distribution and management costs through existing ICT programs. It already has established modalities to meet the recurrent cost for Internet connectivity. Additional funding of \$2.735 million is required to develop more content for learners and primary school teachers as well as compensate the program facilitators (see table 4).

TABLE 4. DETAILED COSTING OF THE ICT PROGRAM, 2013–15 (MILLIONS OF DOLLARS)

Description (number and unit price)	Total cost
Content development for learners (6 modules per year for 3 years; unit cost: \$100,000 per module)	1.8
Continuous professional development training materials for primary school teachers (4 modules; unit cost: \$100,000 per module)	.4
Compensation for manager/facilitator (200 facilitators over 3 years; unit cost: \$100 per facilitator)	.035
Contingency for additional equipment (unit cost: \$2,000 per school)	.4
Supplies (unit cost: \$500 per school)	.1
Total	2.735

Total estimated cost of proposal 2:

TABLE 5. ESTIMATED COST OF “TACKLING DROPOUT RATES THROUGH QUALITY IMPROVEMENT,” 2013–15 (MILLIONS OF DOLLARS)

	Annual Cost*	Total Cost
In-service training for early-grade reading teachers	3.3	10
Results-Based School Grant Program	15	45
ICT proposal	0.9	2.735
Total	19.2	57.74

*Assumes three tranches, one in each of the program years (2013-15)

Proposal 3: Tackling “Out-of-School” and “Dropout” Rates through Improved Planning and Monitoring

Beneficiaries: over 900 *woredas*

Estimated annual cost: \$833,333

The final proposal provides a much needed foundation for the successful planning and implementation of the other proposals. It is focused on improving capacity at the *woreda* level and enhancing data collection and use on dropouts and out-of-school children.

Raising Awareness and Capacity at the Woreda Level to Address Dropout Rates and Out-of-School Issues

As noted above, there is a need to equip *woreda*-level staff with skills to identify and deliver services to out-of-school and special needs children and their families. A capacity-building training program developed for *woredas* to address overall governance and planning issues already exists. This program is designed as an output-oriented, on-the-job training effort to strengthen governance in action at the *woreda* level. During the past 10 years, there has been one round of training at the national level and another round in the Oromia region. An assessment of the training program conducted by GEQIP Phase I concluded that the program was very innovative and appropriate to meet the governance needs of the *woredas* (British Council 2010). The proposed program involves a further refinement or expansion with special attention to out-of school and special needs children.

Estimated cost: Based on existing programs, it is estimated that this program will cost approximately \$1,000 per *woreda*, including the cost of development. Total cost capacity building for over 900 *woredas* and 11 regions is \$1 million.

Improving Data Collection and Monitoring of Out-of-School Children and Dropouts

Strengthening data collection and monitoring capacities at the federal, regional, *woreda*, and school levels to address the issues of gender, equity, out-of-school children, and children with special needs will require modifications to the data collection formats, analytical software programs, and training to reorient planning and EMIS professionals at various governance levels.

Estimated cost: The cost of development and distribution of data collection formats is \$500,000, and the cost of training is \$1 million.

Total estimated cost of proposal 3:

TABLE 6. ESTIMATED COST OF “DROPOUT AND OUT-OF-SCHOOL RATES THROUGH IMPROVED PLANNING & MONITORING,” 2013–15 (MILLIONS OF DOLLARS)

	Annual Cost*	Total Cost
Training at <i>woreda</i> level to address out-of-school and dropout issues	0.33	1
Improving data collection and monitoring of out-of-school children and dropouts	0.5	1.5
Total	0.83	2.5

*Assumes three tranches, one in each of the program years (2013-15)

4. Implementation and Financing

Planning and implementing the interventions presented above will require a focused project approach in collaboration with decentralized implementing agencies at both the federal and regional levels of governance. GEQIP Phases 1 and 2 provide an organizational model for implementing a program of action of the nature proposed above. GEQIP is funded by both bilateral and multilateral funding agencies through a multidonor trust fund. The supervising entity for the trust fund is the World Bank. However, the financial management and implementation modalities follow the Government of Ethiopia's regulations.

A coordination office at the Ministry of Education oversees the annual planning and provides implementation support for GEQIP for each of the six components of GEQIP. GEQIP coordination committees at the federal and regional levels provide policy guidance and monitor the progress of implementation. Donor partners that support GEQIP are active participants in monitoring GEQIP's implementation.

While the quality related interventions proposed above fit well within the GEQIP modality, other potential interventions may require implementation modalities that are different from GEQIP. The construction of educational faculties for general education is the responsibility of the regions and the *woredas*. In every region, there exists an organizational framework for capital projects and well-defined procedures. Planning, management, and monitoring are integral parts of the Ministry of Education's capacity-building support to the regions and *woredas* and are also included within GEQIP Phase 2. The proposals above in these areas (mainly proposal 3) can be implemented using the same modalities.

The total estimated cost of the proposed programs is \$792 million for the 2013–15 period (or \$264 million per annum). Out of the total, the government is committed to finance \$503 million (about \$168 million per annum) as part of a further effort to achieve ESDP IV objectives and fill the ESDP IV funding gap. It would, however, need about one third or \$289 million (about \$96 million per annum) to come from donor sources.

ENDNOTES

1. The Ethiopian education system is divided into four cycles: 2 for primary school (grades 1–4 and grades 5–8) and 2 for secondary school; there are three phases of higher education.
2. The pupil/section ratio is the average number of pupils in a given section. The section is used because there is a multi-shift school environment in Ethiopia (EMIS 2012).
3. Ethiopia uses pupil section ratio rather than pupil class ratio because 27 percent of the primary schools use double shift.
4. This informal data was collected during a capacity building program for approximately 120 *woredas* that lasted from 2005 to 2007.
5. Given the time frame of the ESDP IV (2010–2015) and the structure of the Ethiopian financial year, this program would cover two and a half years. The proposals are formulated assuming three tranches of funding over the 2013–2015 period, one in each year. The exact allocation of the funding will need to be further detailed, and adjusted if appropriate.
6. Unit cost of a classroom with student furniture is estimated at \$10,000 per classroom.

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