

Young Lives Ethiopia School Survey 2012–13

Data Overview Report

Elisabetta Aurino, Zoe James and Caine Rolleston



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978-1-909403-48-2

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Printed on FSC-certified paper from traceable and sustainable sources.

Funded by



Ministry of Foreign Affairs of the
Netherlands



Irish Aid

An Roinn Gnóthaí Eachtracha agus Trádála
Department of Foreign Affairs and Trade

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Queen Elizabeth House, 3 Mansfield Road, Oxford OX1 3TB, UK

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Acknowledgements

This report has benefitted from comments from Paul Dornan, Angela Little, Alula Pankhurst and Tassew Woldehanna. The survey fieldwork would not have been possible without the work of Tassew Woldehanna, Abraham Alemu, Chanie Ejigu, Tirsit Asresse, Workneh Abebe, and the team of survey supervisors and fieldworkers. Thanks are due also to the schools, teachers and pupils who participated. All errors are our own.

About Young Lives

Young Lives is an international study of childhood poverty, following the lives of 12,000 children in 4 countries (Ethiopia, India, Peru and Vietnam) over 15 years. www.younglives.org.uk

Young Lives is funded from 2001 to 2017 by UK aid from the Department for International Development (DFID), co-funded by the Netherlands Ministry of Foreign Affairs from 2010 to 2014, and by Irish Aid from 2014 to 2015.

The views expressed are those of the author(s). They are not necessarily those of, or endorsed by, Young Lives, the University of Oxford, DFID or other funders.

1 Introduction and overview

This report provides an overview of the second Young Lives Ethiopia school survey, conducted at the beginning and end of the 2012–13 academic year with nearly 12,000 primary-school children studying in Grades 4 and 5. The report is intended as a baseline descriptive report on the data. The survey was designed to allow analysis of what shapes children’s learning and progression over a school year, which will be explored in further publications.

The Young Lives study

Young Lives is a unique longitudinal study of childhood poverty which has been conducted in Ethiopia since 2002. The survey traces the lives of 3,000 children in two age cohorts (a ‘Younger Cohort’, born in 2002, and an ‘Older Cohort’, aged 8 in 2002) in 20 sentinel sites located in five regions of the country (Addis Ababa, Amhara, Oromia, SNNP and Tigray). It combines periodic data collection at the household and community levels (carried out in 2002, 2006, 2009, 2013, and planned for 2016),¹ with longitudinal qualitative research and nested school surveys (conducted in 2010² and 2012–13). The Young Lives survey data are all publicly archived with the UK Data Service (<http://ukdataservice.ac.uk>). The Ethiopia school survey data will be deposited in the archive for other researchers to use by mid-2015 (for further details see <http://www.younglives.org.uk/what-we-do/access-our-data>).

1.1 The school survey 2012–13

The second school survey extended beyond the 20 Young Lives sites to include ten newly selected sites in the developing regions of Somali and Afar, where historically poor access to and participation in services, including education, is of particular concern to government, donors and NGOs.³ In each of the total of 30 sites, all schools, both government-owned and non-government-owned,⁴ were included in the school-level survey sample, enabling a perspective on the growing phenomenon of private schooling in Ethiopia.⁵

Grade 4 and 5 pupils in these schools were assessed in the core curricular domains of maths and reading comprehension at both the beginning and end of the school year (Wave 1 and Wave 2). In addition, data were collected at the teacher, class, principal and school levels, for the purpose of analysing the determinants of learning progress during a single school year, i.e. providing a ‘value-added analysis’ (to be reported in forthcoming publications).

This report contains a summary of the school survey design, followed by an overview of the data collected. It should be read in conjunction with the associated technical documentation, which discusses the design and fieldwork in greater detail, and which can be found on the Young Lives website (www.younglives.org.uk/our-themes/education).

1 See the recently published ‘Education and Learning: Round 4 Preliminary Findings’ (www.younglives.org.uk/where-we-work/ethiopia) for further details.

2 See Frost and Rolleston (2013) for a review of the first school survey.

3 The addition of these ten sites was funded by Save the Children.

4 The non-government category includes ‘private’, ‘community’, ‘faith-based (e.g. church)’ and ‘NGO’.

5 The inclusion of non-government schools was funded by the Open Society Foundation’s Privatisation in Education Research Initiative (PERI).

1.2 Sample design and site selection

The second school survey in Ethiopia sampled all pupils (including both Young Lives Younger Cohort children and non-Young Lives children) studying in all Grade 4 and Grade 5 classes in all schools located within the geographic boundaries of each survey sentinel site. The survey therefore constitutes a site-level census of all Grade 4 and 5 pupils attending school within the geographic boundaries of the 30 sentinel sites.⁶

The survey was conducted at both the beginning (Wave 1) and end (Wave 2) of the school year. At Wave 1, the pupil-level sample included all pupils present on the first day of the survey visit to the school. These pupils were then followed up at Wave 2, without replacement of absent pupils.⁷

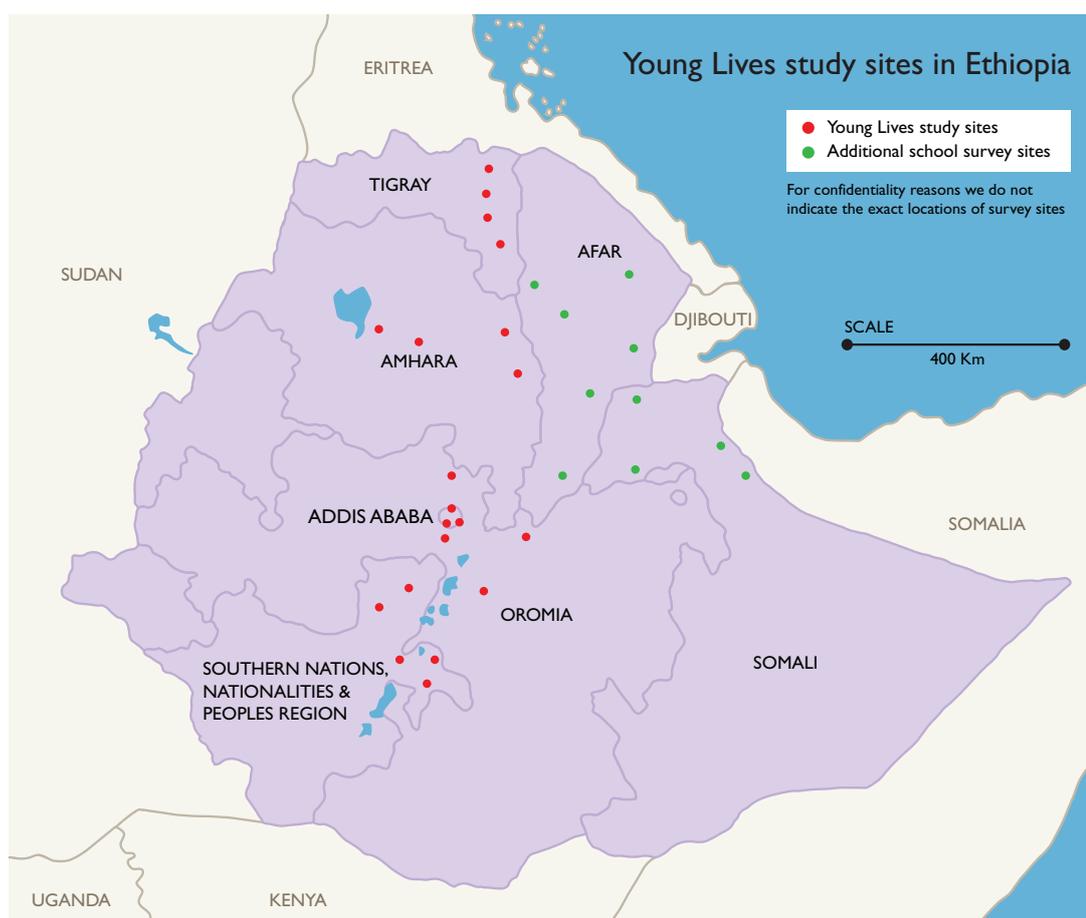
The twenty main Young Lives sites (in the regions of Addis Ababa, Amhara, Oromia, SNNP and Tigray) were selected purposely in 2001 to ensure that the household survey reflected the cultural and geographic diversity of the country, including urban–rural differences, but with a pro-poor bias and a focus on areas with food insecurity (see Outes-Leon and Sanchez 2008 for further details). Between three and five sites were selected in each region to represent diversity across zones and ethnicities. The ten new sites in Somali and Afar were selected according to the same criteria as in the household survey, but with additional considerations for fieldworker safety and security.

While not statistically representative at the national or regional levels, the survey includes a range of community settings illustrative of the diversity of the country.

Appendix 1 provides a description of the 30 school-survey sites. The geographic distribution of survey sites is illustrated in Figure 1.0.

6 Note that those Younger Cohort children studying in schools located outside the geographic boundaries of each sentinel site, and those studying in grades other than Grade 4 and 5, were not included in the survey. In total, 493 Young Lives children were found to be studying in Grade 4 or 5 classes in surveyed schools.

7 In other words, where survey pupils were not present at the time of survey Wave 2, they were not 'replaced' in the sample by any additional non-survey children.

Figure 1.0. Map of school survey sites

1.3 Survey design and content

The survey instruments administered included pupil, teacher, class and school-level questionnaires and observation protocols.

At Wave 1 of the survey, pupils completed a background questionnaire, an attitudinal assessment (focused on ‘school engagement’) and learning assessments in maths and reading comprehension. Teachers completed background questionnaires and attitudinal assessments (focused on ‘teacher efficacy’), and they answered questions about their classes and teaching. Those teachers who taught maths also completed a ‘pedagogical content knowledge’ assessment. Principals completed a questionnaire which included questions about their backgrounds as well as school management and resources. In addition, fieldworkers completed an observation of the school facilities and collected administrative (school register) data on pupil attendance.

At Wave 2 of the survey, pupils completed a second set of learning assessments in maths and reading comprehension. In addition, fieldworkers collected administrative data on pupil and teacher absenteeism and retention during the school year, and data on pupils’ scores on school-administered assessments. Data relating to issues of continuity and change in teaching during the 2012–13 academic year were also collected.

1.4 Description of the final sample

The final sample included 94 'schools'⁸ and 280 classes (142 Grade 4 and 134 Grade 5). The majority of surveyed schools are government-owned (75 out of 94), but 19 non-government-owned schools were also surveyed in sites in Addis Ababa, SNNP and Somali regions.⁹

Table 1.0. *School and class sample by region*

| Region | Number of sentinel sites | School sites | | | Classes | | |
|-------------------|--------------------------|--------------------|----------------------|-----------|------------|------------|------------|
| | | Government - owned | Non-government-owned | Total | Grade 4 | Grade 5 | Total |
| Addis Ababa sites | 3 | 7 | 5 | 12 | 26 | 21 | 47 |
| Amhara sites | 4 | 13 | 0 | 13 | 19 | 13 | 32 |
| Oromia sites | 4 | 8 | 0 | 8 | 14 | 12 | 26 |
| SNNP sites | 5 | 14 | 6 | 20 | 32 | 35 | 67 |
| Tigray sites | 4 | 13 | 0 | 13 | 19 | 21 | 40 |
| Somali sites | 4 | 11 | 8 | 19 | 22* | 18 | 40 |
| Afar sites | 6 | 9 | 0 | 9 | 14 | 14 | 28 |
| Total | 30 | 75 | 19 | 94 | 142 | 134 | 280 |

'School sites' includes main and 'satellite' school campuses (treated separately), but in most cases they are equivalent to 'schools'.

* This includes four Grade 3 classes in the Somali region, where two main school sites and two satellite school sites did not have any Grade 4 classes. Fieldworker reports suggested that this was because these schools were transitioning away from the Alternative Basic Education (ABE) structure. For the purposes of this report, these Grade 3 classes are grouped with the Grade 4 classes.

Table 1.1. *Pupil sample and instrument completion by region and survey wave*

| Region | Wave 1 | | | Wave 2 | | Waves 1 and 2 |
|-------------------|---|--|---|--|--|---|
| | All pupils enrolled in class at time of W1 (total) ^a | Pupils included in survey (total) ^b | Survey pupils completed all W1 instruments ^c | Survey pupils still enrolled at W2 (total) | Survey pupils present at W2 (total) ^d | Survey pupils completed all W1 & W2 instruments (total) |
| Addis Ababa sites | 2,453 | 2,297 | 2,243 | 2,237 | 1,987 | 1,943 |
| Amhara sites | 1,517 | 1,232 | 1,161 | 1,146 | 953 | 911 |
| Oromia sites | 1,342 | 1,116 | 1,083 | 1,001 | 927 | 903 |
| SNNP sites | 3,220 | 2,869 | 2,784 | 2,633 | 2,419 | 2,358 |
| Tigray sites | 1,978 | 1,792 | 1,718 | 1,757 | 1,608 | 1,548 |
| Somali sites | 1,755 | 1,475 | 1,431 | 1,333 | 1,187 | 1,157 |
| Afar sites | 1,459 | 1,201 | 1,140 | 1,152 | 987 | 937 |
| Total | 13,724 | 11,982 | 11,560 | 11,259 | 10,068 | 9,757 |

a i.e. all pupils listed as being enrolled on the class register.

b i.e. those children attending on the first day on which a pupil-level instrument was administered in their class at Wave 1.

c i.e. pupils completed the background questionnaire, maths test, and reading-comprehension test.

d i.e. survey pupils present at time of Wave 2 (and who were present in Wave 1) measured by completion of at least one of maths test or reading-comprehension test at time of Wave 2.

8 This includes two satellite sites treated separately from the 'main' school site to which they are attached.

9 The inclusion of non-government schools in certain sites must be borne in mind in interpreting results.

Table 1.1 details the pupil-level sample and instrument completion at Wave 1 and Wave 2. A total of 13,724 pupils were recorded as enrolled (in school registers) at the time of Wave 1, but only 11,982 (87.3 per cent) of these pupils were found to be attending during the enumeration exercise of the Wave 1 survey visit. It is these 11,982 pupils who constitute the survey sample. Of these 11,982 survey pupils, 11,259 were recorded as still enrolled in school at the time of Wave 2, but only 10,068 (84.0 per cent of those attending at Wave 1) were present during the enumeration exercise of the Wave 2 survey visit. A total of 9,757 survey pupils completed all survey instruments in both survey waves.

Table 1.2. *Grade distribution of survey pupils by region and survey wave*

| Region | Survey pupils at Wave 1 | | | | | Survey pupils present at Wave 2 | | | | |
|-------------------|-------------------------|-------------|--------------|-------------|---------------|---------------------------------|-------------|--------------|-------------|---------------|
| | Grade 4 | | Grade 5 | | Total | Grade 4 | | Grade 5 | | Total |
| | N | % | N | % | | N | % | N | % | N |
| Addis Ababa sites | 1,250 | 54.4 | 1,047 | 45.6 | 2,297 | 1,100 | 55.4 | 887 | 44.6 | 1,987 |
| Amhara sites | 723 | 58.7 | 509 | 41.3 | 1,232 | 558 | 61.7 | 365 | 38.3 | 953 |
| Oromia sites | 606 | 54.3 | 510 | 45.7 | 1,116 | 498 | 53.7 | 429 | 46.3 | 927 |
| SNNP sites | 1,368 | 47.7 | 1,501 | 52.3 | 2,869 | 1,167 | 48.2 | 1,252 | 51.8 | 2,419 |
| Tigray sites | 812 | 45.3 | 980 | 54.7 | 1,792 | 723 | 45.0 | 885 | 55.0 | 1,608 |
| Somali sites | 777 | 52.7 | 698 | 47.3 | 1,475 | 621 | 52.3 | 566 | 47.7 | 1,187 |
| Afar sites | 606 | 50.5 | 595 | 49.5 | 1,201 | 497 | 50.4 | 490 | 49.7 | 987 |
| Total | 6,142 | 51.3 | 5,840 | 48.7 | 11,982 | 5,194 | 51.6 | 4,874 | 48.4 | 10,068 |

The distribution of sample pupils across Grades 4 and 5 is presented in Table 1.2. In almost all regions the pupil-level sample is relatively evenly distributed between the two grades. Exceptions to this are found in Amhara, where Grade 4 pupils comprise approximately 60 per cent of the total pupil sample, and in Tigray, where Grade 5 pupils comprise approximately 55 per cent of the total pupil sample. The composition of the sample by grade did not change notably between survey waves 1 and 2.

2 Pupil characteristics

The following section presents descriptive statistics for key pupil characteristics by region. Missing values (due to non-response by pupils) are reported where appropriate.

2.1 Gender

Across the whole sample, the survey includes approximately the same number of boys and girls, with boys making up 48.8 per cent of the sample, and girls 49.6 per cent. Disaggregated by region, this pattern is largely reflected in Tigray, SNNP, Oromia and Amhara regions, where girls outnumber boys by only approximately 1 to 3 per cent of the sample. However, in Addis Ababa, the sample includes approximately 10 per cent more girls than boys (54.4 per cent compared with 44.1 per cent), and in Somali and Afar boys outnumber girls by approximately 14 and 9 per cent, respectively.

Table 2.0. *Pupils' gender by region*

| Region | Boys | | Girls | | No response | | Total |
|-------------------|--------------|-------------|--------------|-------------|-------------|------------|---------------|
| | N | % | N | % | N | % | N |
| Addis Ababa sites | 1,012 | 44.1 | 1,249 | 54.4 | 36 | 1.6 | 2,297 |
| Amhara sites | 577 | 46.8 | 612 | 49.7 | 43 | 3.5 | 1,232 |
| Oromia sites | 530 | 47.5 | 558 | 50.0 | 28 | 2.5 | 1,116 |
| SNNP sites | 1,393 | 48.6 | 1,472 | 51.3 | 4 | 0.1 | 2,869 |
| Tigray sites | 888 | 49.6 | 904 | 50.5 | 0 | 0 | 1,792 |
| Somali sites | 820 | 55.6 | 625 | 42.4 | 30 | 2.0 | 1,475 |
| Afar sites | 631 | 52.5 | 521 | 43.4 | 49 | 4.1 | 1,201 |
| Total | 5,851 | 48.8 | 5,941 | 49.6 | 190 | 1.6 | 11,982 |

2.2 Age

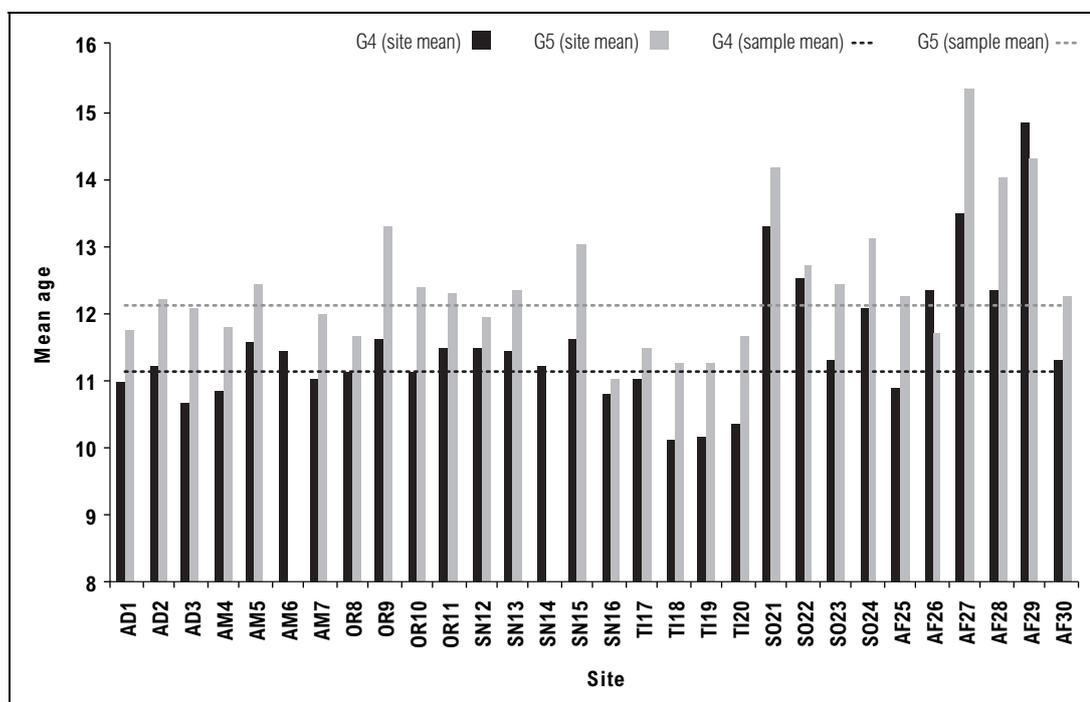
The ages of pupils vary by grade, region and site, but in a majority of sites pupils' ages are generally consistent with age-appropriate enrolment and progression. Pupils in Grade 4 are on average one year younger than pupils in Grade 5 (11.1 versus 12.1 years of age), as expected,¹⁰ and this pattern is found across all survey sites, except in two sites in Afar.¹¹

¹⁰ This mean value is similar to that which would be expected from correct age-for-grade enrolment and progression, which if children enrol at the age of 7 would mean that children in Grade 4 should be between 10 and 11 years old, and those in Grade 5 should be between 11 and 12 years old.

¹¹ In Afar sites 26 and 29, children in Grade 5 are slightly younger than children in Grade 4, being 11.7 in Grade 5 and 12.3 in Grade 4 in site 26, and 14.3 in Grade 5 and 14.8 in Grade 4 in site 29. There is no obvious explanation for this, but the differences are relatively small, and it should be noted that the total pupil sample in these sites is also small, at 66 and 122 respectively.

In general, pupils in the Somali and Afar sites appear to be consistently older than the overall mean age, but there is some variation by site, as shown in Figure 2.0. For example, pupils in Grade 5 in Afar site 27 are on average older than 15, while in Afar site 25 pupils in Grade 5 are on average just over 12, in line with the overall mean. By contrast, in the Tigray sites children are consistently younger than the average age.

Figure 2.0. Mean pupil age reported at survey Wave 1 by site and grade



2.3 Pupils’ mother tongues

Pupils speak a variety of languages at home, as reported in Table 2.1. Most survey pupils speak one of three languages at home: Amharic (51.1 per cent), Tigrigna (15.4 per cent), or Oromiffa (8.2 per cent), but many other languages are also spoken. There is notable within-region variation in languages spoken at home. For example, in the SNNP sites 50 per cent of pupils report speaking Amharic at home, while in Somali and Afar 40 and 46 per cent of pupils do so, respectively; these findings are probably linked to migration and urban sites. Conversely, in the Tigray sites almost 100 per cent of pupils report speaking Tigrigna at home, reflecting the more monolingual nature of Tigray more generally.

Table 2.1. *Pupils' mother tongue by region (where >1%)*

| Region | Mother Tongue | | | | | | | Total |
|-------------------|-------------------|--------------|------------|------------|--------------|-----------------------------|--------------|---------------|
| | Afar ^a | Amharic | Oromiffa | Somali | Tigrigna | SNNP languages ^b | Missing data | |
| Addis Ababa sites | N 44 | 2,013 | 87 | - | 43 | 57 | 35 | 2,297 |
| | % 1.9 | 87.6 | 3.8 | - | 1.87 | 2.5 | 1.5 | 100 |
| Amhara sites | N - | 1,182 | - | - | - | - | 43 | 1,232 |
| | % - | 95.9 | - | - | - | - | 3.5 | 100 |
| Oromia sites | N - | 236 | 847 | - | - | - | 28 | 1,116 |
| | % - | 21.1 | 76.0 | - | - | - | 2.5 | 100 |
| SNNP sites | N - | 1,569 | - | - | - | 1,233 | 40 | 2,869 |
| | % - | 54.7 | - | - | - | 43.0 | 1.4 | 100 |
| Tigray sites | N - | - | - | - | 1,789 | - | - | 1,792 |
| | % - | - | - | - | 100.0 | - | - | 100 |
| Somali sites | N - | 572 | 19 | 818 | - | 24 | 29 | 1,475 |
| | % - | 38.8 | 1.3 | 55.5 | - | 1.6 | 2.0 | 100 |
| Afar sites | N 579 | 553 | 15 | - | - | - | 49 | 1,201 |
| | % 48.2 | 46.04 | 1.3 | - | - | - | 4.1 | 100 |
| Total | N 639 | 6,128 | 986 | 820 | 1,840 | 1,320 | 224 | 11,982 |
| | % 5.3 | 51.1 | 8.2 | 6.8 | 15.4 | 11.0 | 1.9 | 100 |

a Those children in Addis Ababa and SNNP who report Afar as their mother tongue might be expected to be migrants (since in SNNP they are concentrated in the urban sites).

b The following languages have been grouped together under the category 'SNNP languages' for ease of presentation: Guraghe, Hadiya, Sidama, Silti, Wolayta.

Table 2.2. *Pupils who report speaking a language in addition to their mother tongue*

| Region | Pupils speak only their mother tongue | | Pupils speak an additional language | | Missing data | | Total |
|-------------------|---------------------------------------|-------------|-------------------------------------|------------|--------------|------------|---------------|
| | N | % | N | % | N | % | N |
| Addis Ababa sites | 2,243 | 97.7 | 19 | 0.8 | 35 | 1.5 | 2,297 |
| Amhara sites | 1,186 | 96.3 | 3 | 0.2 | 43 | 3.5 | 1,232 |
| Oromia sites | 1,086 | 97.3 | 2 | 0.2 | 28 | 2.5 | 1,116 |
| SNNP sites | 2,854 | 99.5 | 13 | 0.5 | 2 | 0.1 | 2,869 |
| Tigray sites | 1,792 | 100.0 | 0 | 0.0 | 0 | 0.0 | 1,792 |
| Somali sites | 1,442 | 97.8 | 4 | 0.3 | 29 | 2.0 | 1,475 |
| Afar sites | 832 | 69.3 | 320 | 26.6 | 49 | 4.1 | 1,201 |
| Total | 11,435 | 95.4 | 361 | 3.0 | 186 | 1.6 | 11,982 |

Only 3.0 per cent of the pupils report speaking a language other than their mother tongue proficiently.¹² For all of these pupils this language is Amharic. The majority of these pupils are from Afar, comprising 26.6 per cent of the Afar sample. As is discussed in greater detail below, Afar is the only survey region to teach mainly in a language (Amharic) which is not the mother tongue of the majority of survey pupils from the very beginning of the first cycle of primary school.¹³ This finding therefore perhaps relates to the fact that children at this stage of schooling in Afar have had to develop proficiency in a second language in a way that students in other regions (where instruction is largely in the mother tongue) have not.

¹² The question asked pupils which languages they spoke 'well'.

¹³ Some zones of SNNP elected to maintain Amharic as the language of instruction from the first cycle of primary, but these locations are not included in the survey. As such, teaching in the first cycle of primary in survey schools in the SNNP sites is most often conducted in the mother tongue of the majority of survey pupils, shifting to a language which is not the mother tongue of the majority of survey pupils (English) only at the start of the second cycle.

2.4 Other characteristics

The pupil questionnaire contained questions on pupils' households' durable assets and access to services, for the purposes of measuring economic status. A composite score computed from these indicators is employed as a proxy measure for overall household economic advantage. The percentage of pupils who fall into the most disadvantaged quintile in each region is reported in Table 2.3. Only 3.4 per cent of pupils in the Addis Ababa sites fall into the most disadvantaged group, a proportion which rises to 51.4 per cent of pupils in the Tigray sites.¹⁴

Pupils were asked whether they slept in the same house or compound all year round, or whether they moved locations with animals, or moved locations for other reasons. We interpret movement with animals as a potential indicator of pupils who come from pastoralist backgrounds and, as expected, we found the greatest numbers of these pupils in the Somali and Afar sites.

In total, 20.5 per cent of pupils had lost one or both parents (were single or double orphans). This was particularly common in the SNNP sites, at 30.6 per cent overall for the region.

Table 2.3. *Key pupil characteristics by region*

| Region | Pupils in most disadvantaged quintile, % ^a | Pupils reporting at least one health problem, % ^b | Pupils who report moving with animals, % ^c | Pupils who have lost at least one parent, % | On a usual school day pupil reports spending some time on the following: ^d | | |
|-----------------------|---|--|---|---|---|-----------------------------------|---------------------------|
| | | | | | Working in family business/farm, % | Doing chores/caring for family, % | Working for pay / wage, % |
| Addis Ababa sites | 3.4 | 25.4 | 2.7 | 21.3 | 35.8 | 75.1 | 23.2 |
| Amhara sites | 38.6 | 19.9 | 6.3 | 16.0 | 66.6 | 75.8 | 22.1 |
| Oromia sites | 6.4 | 26.8 | 2.0 | 18.4 | 62.6 | 79.7 | 22.9 |
| SNNP sites | 10.9 | 26.6 | 5.8 | 30.6 | 50.6 | 78.8 | 25.4 |
| Tigray sites | 51.4 | 15.0 | 0.5 | 10.2 | 62.3 | 61.2 | 3.4 |
| Somali sites | 22.2 | 26.0 | 10.4 | 14.2 | 54.0 | 67.9 | 24.6 |
| Afar sites | 13.9 | 12.6 | 12.6 | 24.1 | 58.7 | 73.9 | 27.5 |
| Sample average | 19.6 | 22.5 | 5.4 | 20.5 | 53.5 | 73.4 | 21.2 |

a This score is created by means of Principal Components Analysis (PCA) of pupil-reported household durable assets, including telephone, radio, television, bicycle, mobile telephone, car/truck, motorcycle/scooter, table, chair, bench/stool, fridge, bed, electricity, water pumped into home, and the number of rooms in the home.

b Pupil reports one or more of the following health problems: sight problems, hearing problems, headaches, fever, stomach problems.

c Pupil reports not sleeping in the same household or compound all year round, but rather moving with their animals.

d Pupils were asked to detail how much time they spent on different work-related activities. In this instance we have grouped all pupils who report spending anywhere between 'less than one hour' and 'more than four hours' into one category, omitting only those who report 'none'.

14 Care must be taken in interpreting this, since in some rural sites 'disadvantage' may be better judged by limited animal ownership, which is not taken into account here.

More than half of the sample pupils reported spending time on a ‘typical school day’ working in the family business or farm, and/or doing chores or caring for family members. Working for pay on a school day was found to be less common, but not unusual, at 21.2 per cent for the whole sample, ranging from 3.4 per cent in the Tigray sites to 27.5 per cent in the Afar sites, findings no doubt related in part to site-level employment opportunities and to household poverty.¹⁵

3 Pupils’ educational status and histories

The following section presents descriptive statistics concerning pupils’ educational status and histories by region.

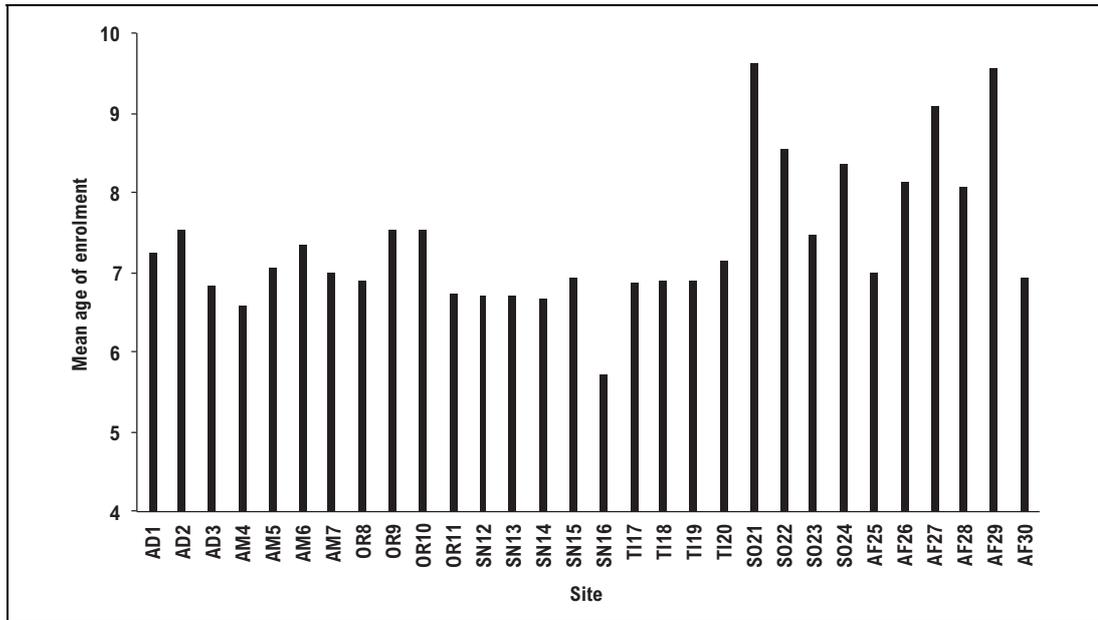
The mean age of enrolment in school overall is 6.9 years, in line with the expected age of 7 in government schools, and ranging from 6.5 in Somali sites to 7.3 in Oromia sites. Disaggregation by attendance at government and non-government schools reveals differences by school type, with pupils enrolling in the government sector being on average 7.1 years old, and those in the non-government sector 5.8 years old. Figure 3.0 presents site-level mean enrolment ages for those pupils studying in government-sector schools (in all sites except Addis Ababa, SNNP and Somali this constitutes the entire sample). In some sites in Somali and Afar, pupils in government schools do not enrol until after the age of nine on average, two years after the expected enrolment age of seven.

Table 3.0. *Selected indicators of pupils’ educational history and status*

| Region | Mean age of pupil enrolment, whole sample (years) | Mean age of pupil enrolment, government schools (years) | Mean age of pupil enrolment, non-government schools (years) | Pupils enrolled by age 7, whole sample % | Pupils attended preschool, % | Pupils repeated a grade, % | Pupils ever dropped out, % |
|-----------------------|---|---|---|--|------------------------------|----------------------------|----------------------------|
| Addis Ababa sites | 7.2 | 7.3 | 6.7 | 63.9 | 74.2 | 24.3 | 15.3 |
| Amhara sites | 6.9 | 6.9 | – | 75.2 | 39.5 | 34.3 | 20.5 |
| Oromia sites | 7.3 | 7.3 | – | 60.9 | 35.2 | 13.2 | 22.2 |
| SNNP sites | 6.5 | 6.6 | 5.7 | 75.1 | 58.4 | 28.1 | 20.0 |
| Tigray sites | 6.9 | 6.9 | – | 88.5 | 20.4 | 14.3 | 11.4 |
| Somali sites | 6.5 | 8.0 | 5.6 | 66.6 | 53.8 | 12.6 | 10.6 |
| Afar sites | 7.3 | 7.3 | – | 64.8 | 51.1 | 40.2 | 24.1 |
| Rural | 7.07 | – | – | 71.4 | 23.2 | 20.6 | 20.4 |
| Urban | 6.8 | – | – | 71.7 | 61.4 | 25.2 | 16.1 |
| Sample average | 6.9 | 7.1 | 5.8 | 72.7 | 50.4 | 23.9 | 17.3 |

¹⁵ There are also gendered dimensions to time spent on different work activities which will be explored in future research.

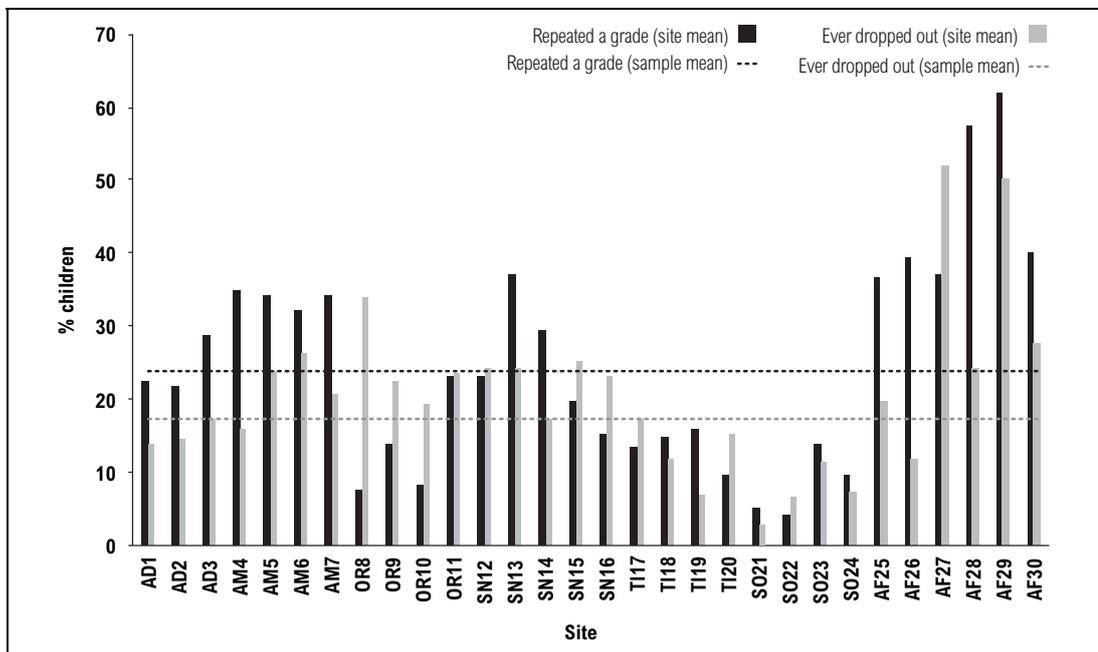
Figure 3.0. Mean enrolment age (government schools), by site



Approximately half of pupils report having attended pre-school, but this is very much an urban phenomenon, with just 23.2 per cent of the rural sample having attended, compared with 61.4 per cent in urban areas.

Across the whole sample, 23.9 per cent of pupils report having repeated a grade, and 17.3 per cent of pupils report having dropped out. There is notable variation in grade repetition and drop-out history by region and site. Figure 3.1 presents percentages of pupils by site who have repeated a grade or have ever dropped out, phenomena which are both particularly high in Afar sites, but also in sites in the other regions, for example Oromia site 8, which has a high percentage of pupils who have dropped out, but relatively low grade repetition.

Figure 3.1. Incidence of grade repetition and drop-out history by site



3.1 Language of instruction in school

Ethiopian primary schools teach predominantly in the child's mother tongue, such that survey children learn in a variety of languages. Table 3.1 gives details of policies on the language of instruction by region and grade, together with the languages that were found to be in use in survey schools.

Table 3.1. *Medium of Instruction (MOI) in policy and practice*

| Region | MOI policy | | MOI in use during survey* | |
|-------------------|--|---------------------|---|--------------------------------------|
| | Grade 4 | Grade 5 | Grade 4 | Grade 5 |
| Addis Ababa sites | Amharic | Amharic | Amharic | Amharic English |
| Amhara sites | Amharic Oromiffa | Amharic Oromiffa | Amharic | Amharic |
| Oromia sites | Oromiffa Amharic | Oromiffa Amharic | Oromiffa Amharic | Oromiffa Amharic |
| SNNP sites | Amharic Hadiya Sidama Silti Wolayta | English | Amharic Hadiya Sidama Wolayta English | Amharic English |
| Tigray sites | Tigrigna | Tigrigna | Tigrigna | Tigrigna |
| Afar sites | Amharic Afar (ABE) | Amharic | Amharic | Amharic Afar |
| Somali sites | Somali Amharic | Somali Amharic | Somali Amharic English | Somali Amharic English Afar |

* Note that most instances of schools reporting MOI which diverged from official policy were not usually government schools. Rather, those schools teaching in English in Grade 4 in SNNP and Somali were either private or faith-based, and those in Grade 5 in Addis Ababa and Somali were either private, community, or faith-based. The exceptions to this rule were a single government school using Amharic in Grade 5 in SNNP, and a Somali-based community school using Afar.

Source: data on MOI policy taken from Heugh, Benson, Bogale, and Yohannes (2006).

Approximately 70 per cent of sample pupils learn in the same language that they speak at home, but this varies by grade and region, as shown in Table 3.2. This is no doubt linked to regional policies, as detailed above. For example, in SNNP, the most linguistically diverse survey region, 68.2 per cent of Grade 4 pupils and 0.1 per cent of Grade 5 pupils were learning in their mother tongues. In Grade 4 this probably relates to the inclusion of English-medium non-government schools in urban sites, as well as to the more general linguistic diversity of the region. In Grade 5, schools typically shift to instruction in English, following regional policy, so that very few pupils continue to learn in their mother tongues. Similarly in Afar, only 47.1 per cent of pupils across the two grades learn in their mother tongue, a finding related to the fact that the language of instruction is officially Amharic. In Tigray, by contrast, almost all survey pupils learn in their mother tongue in both Grades 4 and 5.

Table 3.2. *Instruction in mother tongue*

| Region | % pupils learning in the same language they speak at home | | |
|-----------------------|---|-------------|-------------|
| | Grade 4 | Grade 5 | Total |
| Addis Ababa sites | 86.3 | 82.7 | 84.7 |
| Amhara sites | 96.8 | 94.7 | 95.9 |
| Oromia sites | 88.8 | 88.8 | 88.8 |
| SNNP sites | 68.2 | 0.1 | 32.6 |
| Tigray sites | 99.9 | 99.8 | 99.8 |
| Somali sites | 76.7 | 61.6 | 69.6 |
| Afar sites | 47.0 | 47.2 | 47.1 |
| Sample average | 80.5 | 59.8 | 70.4 |

4 Pupil enrolment and attendance in Grades 4 and 5

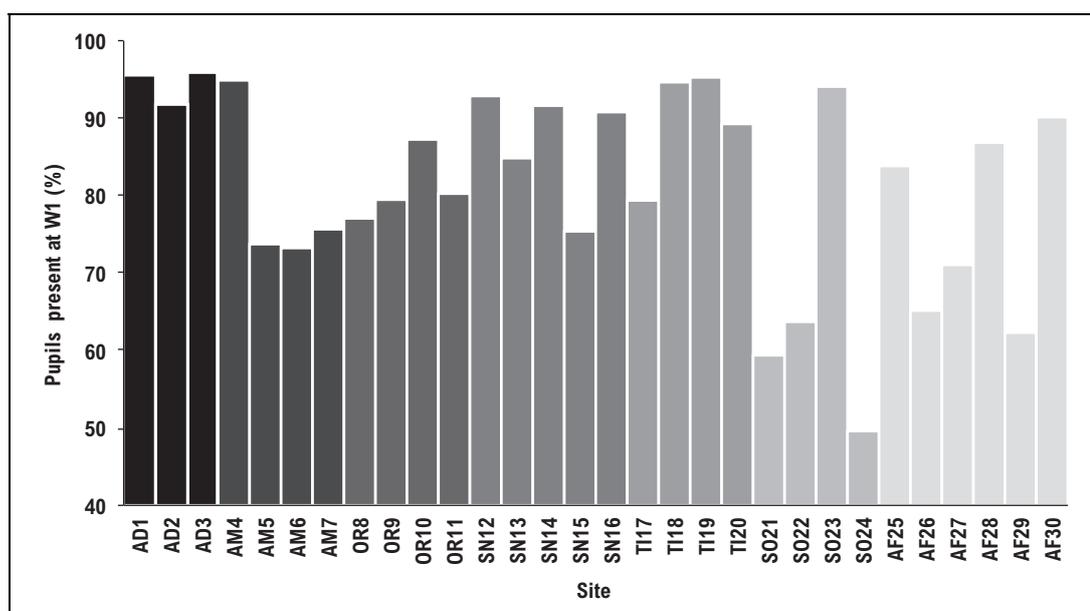
The longitudinal nature of the survey enables an examination of changing patterns of enrolment and attendance over the course of a single school year.

Table 1.1 presented the total number of pupils enrolled in survey classes at the time of Wave 1, and the numbers present at enumeration – constituting the pupil-level survey sample. These survey pupils were then followed up at survey Wave 2, which collected information on their enrolment status, whether they were present at the time of the survey, and their number of days of absenteeism over the course of the school year.

Table 4.0 reports the percentages of children enrolled (named on the register) at the start of the school year who were also present at the time of the Wave 1 survey enumeration. Overall, 87.3 per cent of children enrolled were present at the time of the Wave 1 survey. Disaggregated by region, this figure ranges from 81.2 per cent of children in Amhara sites to 93.6 per cent of children in Addis Ababa sites. Within-region variation in the attendance of pupils is also found, as presented in Figure 4.0. Certain sites in the Somali and Afar regions appear to have particularly low rates of attendance, at below 50 per cent in one Somali site, while this may also reflect the degree of accuracy of administrative records (school registers).

Table 4.0. *Attendance at Wave 1 of pupils enrolled on the register, by survey region*

| Region | Children enrolled on register who were present in school at time of Wave 1 | | | | | | |
|-------------------|--|--------------|--------------|--------------|-----------|-------------|---------------|
| | Present | | Absent | | Missing | | Total |
| | N | % | N | % | N | % | N |
| Addis Ababa sites | 2,297 | 93.6 | 156 | 6.4 | 0 | 0.0 | 2,453 |
| Amhara sites | 1,232 | 81.2 | 285 | 18.8 | 0 | 0.0 | 1,517 |
| Oromia sites | 1,116 | 83.2 | 226 | 16.8 | 0 | 0.0 | 1,342 |
| SNNP sites | 2,869 | 89.1 | 338 | 10.5 | 13 | 0.4 | 3,220 |
| Tigray sites | 1,792 | 90.6 | 186 | 9.4 | 0 | 0.0 | 1,978 |
| Somali sites | 1,475 | 84.2 | 280 | 16.0 | 0 | 0.0 | 1,755 |
| Afar sites | 1,201 | 82.3 | 258 | 17.7 | 0 | 0.0 | 1,459 |
| Total | 11,982 | 87.31 | 1,729 | 12.60 | 13 | 0.09 | 13,724 |

Figure 4.0. Attendance at Wave 1 (pupils recorded on register), by site


Information on pupils' continued enrolment in school, and on their attendance on the day of the Wave 2 survey enumeration exercise, is reported in Table 4.1. In all regions, almost 90 per cent or more of pupils continued to be enrolled in school, according to school registers. This may partly reflect the extent to which administrative records were updated during the academic year, however. On the basis of these records, drop-out is apparently relatively low during the course of the year.

Table 4.1. Enrolment at Wave 2 by survey region

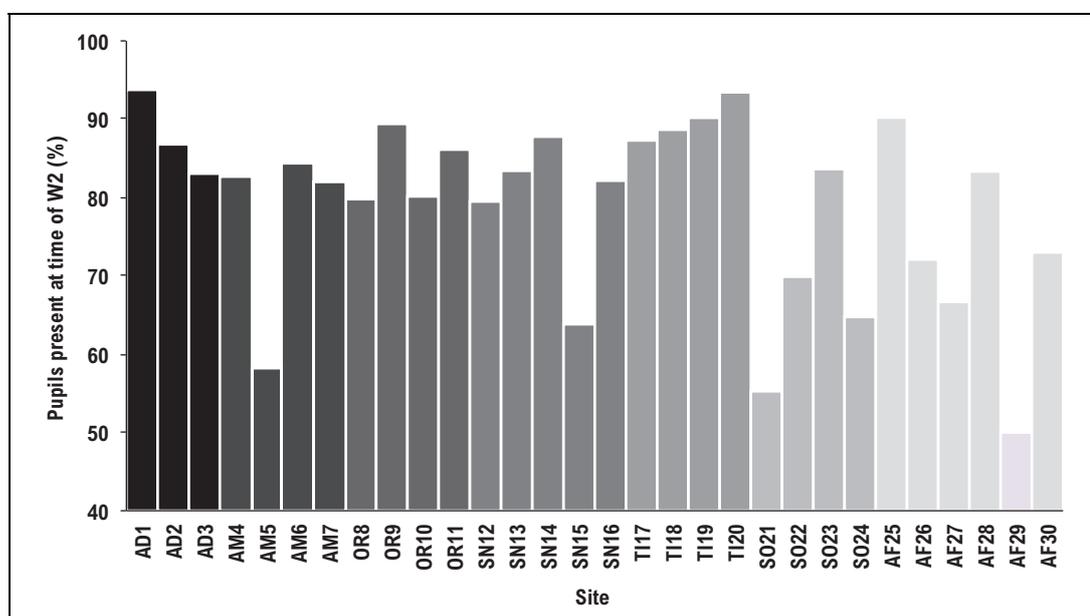
| Region | Survey pupils present at Wave 1 enrolled on register at Wave 2 | | | | | | |
|-------------------|--|-------------|--------------|------------|-----------|------------|---------------|
| | Enrolled | | Not enrolled | | Missing | | Total |
| | N | % | N | % | N | % | N |
| Addis Ababa sites | 2,237 | 97.4 | 55 | 2.4 | 5 | 0.2 | 2,297 |
| Amhara sites | 1,146 | 93.0 | 86 | 7.0 | 0 | 0.0 | 1,232 |
| Oromia sites | 1,001 | 89.7 | 112 | 10.0 | 3 | 0.3 | 1,116 |
| SNNP sites | 2,633 | 91.8 | 226 | 7.9 | 10 | 0.4 | 2,869 |
| Tigray sites | 1,757 | 98.1 | 33 | 1.8 | 2 | 0.1 | 1,792 |
| Somali sites | 1,333 | 90.4 | 139 | 9.4 | 3 | 0.2 | 1,475 |
| Afar sites | 1,152 | 95.9 | 48 | 4.0 | 1 | 0.1 | 1,201 |
| Total | 11,259 | 94.0 | 699 | 5.8 | 24 | 0.2 | 11,982 |

However, when the numbers of pupils present at Wave 2 and at Wave 1 are examined, we find a slightly different picture, as presented in Table 4.2. In total, 84.0 per cent of pupils present at Wave 1 were also present at Wave 2, ranging from 77.4 per cent of pupils in the Amhara sites to 89.8 per cent in Tigray sites. Disaggregation by site in Figure 4.1 shows large site-level variation, with particularly low attendance rates found in some sites in Afar and Somali, and in one site in Amhara and one in SNNP.

Table 4.2. *Pupil attendance at Wave 2 by survey region*

| Region | Survey pupils present at Wave 1 attendance at time of Wave 2 (including those listed as no longer enrolled) | | | | |
|-------------------|---|-------------|--------------------|-------------|---------------|
| | Present Wave 2* | | Not present Wave 2 | | Total |
| | N | % | N | % | N |
| Addis Ababa sites | 1,987 | 86.5 | 310 | 13.5 | 2,297 |
| Amhara sites | 953 | 77.4 | 279 | 22.7 | 1,232 |
| Oromia sites | 927 | 83.1 | 189 | 16.9 | 1,116 |
| SNNP sites | 2,419 | 84.3 | 450 | 15.7 | 2,869 |
| Tigray sites | 1,608 | 89.7 | 184 | 10.3 | 1,792 |
| Somali sites | 1,187 | 80.5 | 288 | 19.5 | 1,475 |
| Afar sites | 987 | 82.2 | 214 | 17.8 | 1,201 |
| Total | 10,068 | 84.0 | 1,914 | 16.0 | 11,982 |

* i.e. survey pupil completed at least one of the Wave 2 survey instruments.

Figure 4.1. *Attendance of survey pupils at Wave 2 by site*

Data on pupil absenteeism during the academic year covered by the survey were collected from administrative records (school registers). For direct comparability, we use the percentage of days absent between 1 October 2012¹⁶ (used as the start date for counting absences in all schools) and the date of the survey visit at Wave 2 (which varied by location but fell between 7 and 22 May 2013¹⁷) for each pupil.

Overall, pupils are absent for an average of 4.6 per cent of the time-period measured, a figure that is slightly higher for boys than girls, ranging from 1.9 per cent of total days in the Addis Ababa sites to 9.6 per cent of days in the Amhara sites. However, significant site-level

16 21 January 2005, Ethiopian calendar.

17 29 August–14 September 2005, Ethiopian calendar.

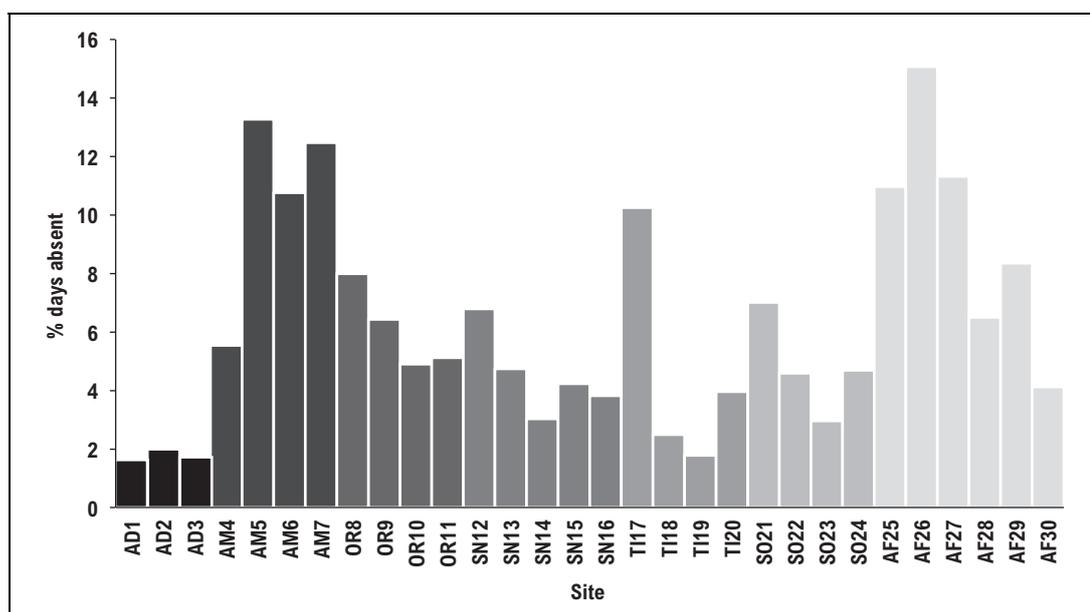
variation is also found, with pupils in one Afar site being absent for a mean of approximately 15 per cent of the time period. Nonetheless, the average level of absenteeism may be considered relatively low, based on these administrative records.

Table 4.3. Absenteeism during the school year (%)

| Region | % of days absent between 1 October 2012 & Wave 2 | | |
|-----------------------|--|------------|------------|
| | Whole sample | Boys | Girls |
| Addis Ababa sites | 1.9 | 2.0 | 1.7 |
| Amhara sites | 9.6 | 10.5 | 8.6 |
| Oromia sites | 5.4 | 5.5 | 5.2 |
| SNNP sites | 3.5 | 3.5 | 3.5 |
| Tigray sites | 4.0 | 4.0 | 4.0 |
| Somali sites* | 3.3 | 3.3 | 3.3 |
| Afar sites | 9.2 | 9.0 | 8.6 |
| Sample average | 4.6 | 4.8 | 4.3 |

* Estimates for Somali sites 21, 22 and 24 may represent an underestimate of absenteeism, because in some schools in these sites attendance data had not been consistently collected by the school during the school year.

Figure 4.2. Absenteeism by survey site



Box 1. *Reasons for attendance and absenteeism in survey sites*

Debriefing reports from field supervisors provided insights into some of the site-level reasons for pupil absenteeism during the survey period.

The Wave 2 survey was conducted in the small window between the end of the Easter holidays and the beginning of the end-of-year exams. This provided only a short timeframe in which fieldwork could be reasonably conducted without significant impact on schools and classes. However, the short period between the start of fieldwork and the Easter holidays meant that in some cases pupils and teachers were still absent when fieldwork began, owing to their having travelled to their family homes for the festivities, or to their attendance at wedding celebrations, which are common at this time of year.

In addition a number of site-specific factors contributed to changes that occurred over the course of the school year. In Amhara site 5, the construction of a new road was reported to have significantly increased pupil absenteeism rates, as children took up the new employment opportunities available. In Tigray sites 17 and 20, frequent absence was recorded as a result of child work, both within the household, in agricultural work, and in other waged work (for example, in stone work). In other sites (such as Oromia site 9) it was reported that attendance was particularly low on market days, because children were expected to assist families at the market.

In one Afar school where absence was particularly high at the end of the school year, different reasons were given for absence, including poor teacher attendance due to their living far away, the interruption of a school-based feeding programme, and the migration of families in search of water. In the Somali region, supervisors reported that conflict in rural areas and general difficulties in physically travelling to schools had affected pupils' attendance throughout the school year.

5 School, principal, class and teacher characteristics

This section presents descriptive statistics of the school, principal, teacher and class characteristics of the survey sample. Data are reported by region, by site, by rural/urban location and by school type where appropriate.

5.1 School and principal characteristics

Table 5.0 presents selected school and principal characteristics by region and location. Survey schools range in age, with those schools located in urban areas being slightly older on average than those in rural areas. Schools in the Somali sites are the most recently established, being on average around 20 years old. Survey schools operate shift, full-day and mixed programmes, related strongly to rural or urban location. Approximately 91 per cent of schools in rural areas operate a shift system, compared with 47 per cent in urban areas. School principals are overwhelmingly male, ranging from 70 per cent of the sample in SNNP to 100 per cent of the sample in both Somali and Afar.

Table 5.0. *Selected school and principal* characteristics by region*

| Region / location | Mean age of school (years) | Shift school system, % | Mean age of principal (years) | Male principal, % | Principal has university degree, % |
|-------------------|----------------------------|------------------------|-------------------------------|-------------------|------------------------------------|
| Addis Ababa sites | 34.1 | 8.3 | 39.6 | 83.3 | 58.3 |
| Amhara sites | 23.5 | 84.6 | 34.6 | 76.9 | 30.8 |
| Oromia sites | 24.3 | 100.0 | 32.1 | 75.0 | 12.5 |
| SNNP sites | 24.4 | 60.0 | 36.9 | 70.0 | 35.0 |
| Tigray sites | 26.2 | 92.3 | 37.4 | 92.3 | 23.1 |
| Somali sites | 20.3 | 63.2 | 31.2 | 100.0 | 15.8 |
| Afar sites | 27.1 | 100.0 | 29.6 | 100.0 | 33.3 |
| Rural | 21.7 | 91.5 | 31.6 | 89.4 | 17.0 |
| Urban | 28.7 | 46.8 | 37.9 | 80.9 | 42.6 |
| Total | 25.2 | 69.2 | 34.7 | 85.1 | 29.8 |

* This table provides data at the school-site level (N=94). Note that in the two satellite schools, the principal was the same as for the main school, so where principal characteristics are reported they have been 'double-counted' for these schools.

Table 5.1. *School resources by region and urban/rural location*

| Region | Electricity in compound on day of survey, % | Water available from 'improved' source on day of survey, %* | Access to flush toilets or pit latrines, % | Functional library, % | Working radio, % |
|-------------------|---|---|--|-----------------------|------------------|
| Addis Ababa sites | 91.8 | 83.3 | 100.0 | 100.0 | 83.3 |
| Amhara sites | 23.1 | 46.2 | 76.9 | 46.2 | 84.6 |
| Oromia sites | 25.0 | 50.0 | 75.0 | 25.0 | 100.0 |
| SNNP sites | 75.0 | 75.0 | 100.0 | 70.0 | 70.0 |
| Tigray sites | 46.2 | 76.9 | 100.0 | 53.9 | 23.1 |
| Somali sites | 52.6 | 15.8 | 73.7 | 15.8 | 21.1 |
| Afar sites | 33.3 | 44.4 | 100.0 | 33.3 | 44.4 |
| Urban | 89.4 | 76.6 | 97.9 | 72.3 | 72.3 |
| Rural | 17.0 | 34.0 | 80.9 | 27.7 | 42.6 |
| Total | 53.2 | 55.3 | 89.4 | 50.0 | 57.5 |

* Drawing on the WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation categorisation of improved and unimproved drinking water, the following response categories are coded as 'improved' sources of drinking water: rainwater, protected well or spring, tube well or borehole, piped water.

Availability of school resources varies notably by region and by urban/ rural location, as shown in Table 5.1. Rural schools are much less likely to have electricity or drinking water from an 'improved' source, when compared with urban schools. Only 15.8 per cent of schools in the Somali region had drinking water available from an 'improved' source, compared with the sample mean of 55.3 per cent. Access to either flush toilets or pit latrines is relatively good overall,¹⁸ at 89.4 per cent of the total school sample.

18 It should be noted that we are not able to distinguish between 'improved' and 'not improved' pit latrines here, since the question categorised facilities as either 'flush toilet,' or 'pit latrine or dry latrine', or 'other'.

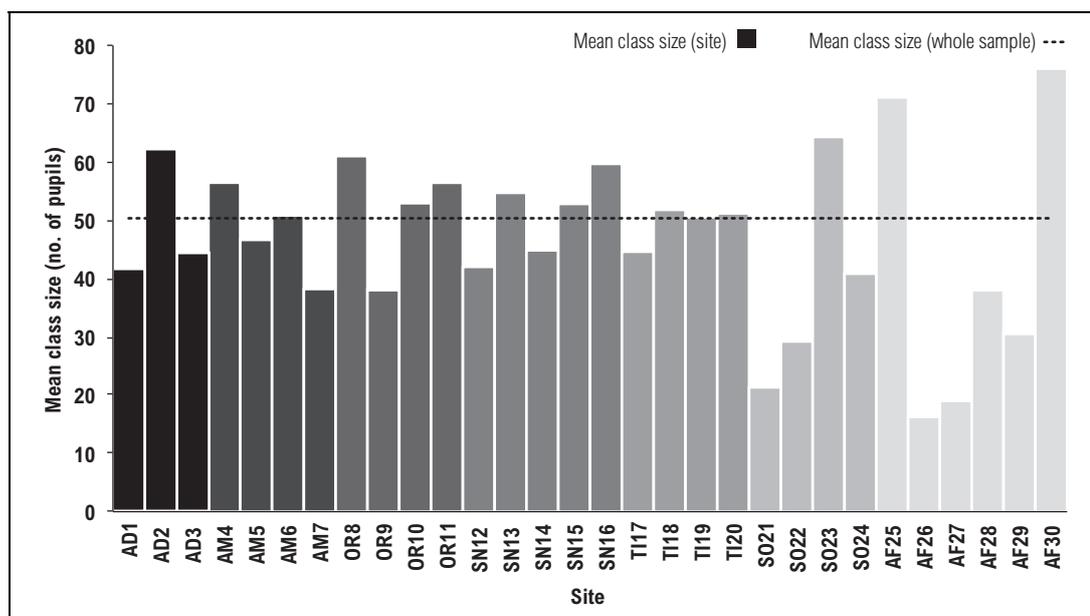
5.2 Class and teacher characteristics

Table 5.2. *Class characteristics and resources by region and urban/rural location*

| Region / location | Mean class size (number of pupils) | Class has both teacher chair and desk, % | Mean hours of teaching per day (hours) | Class using new government maths textbooks, % | Class using new government literacy textbooks, % | All pupils in class have their own math textbook, % | All pupils in class have their own literacy textbook, % |
|-------------------|------------------------------------|--|--|---|--|---|---|
| Addis Ababa sites | 52.2 | 27.7 | 5.1 | 95.7 | 66.0 | 93.6 | 80.9 |
| Amhara sites | 47.4 | 25.0 | 4.1 | 100.0 | 28.1 | 100.0 | 62.5 |
| Oromia sites | 51.6 | 42.3 | 4.0 | 92.3 | 42.3 | 11.5 | 69.2 |
| SNNP sites | 48.1 | 29.9 | 4.3 | 97.0 | 25.4 | 80.6 | 40.3 |
| Tigray sites | 49.4 | 25.0 | 4.0 | 90.0 | 15.0 | 87.5 | 57.5 |
| Somali sites | 52.0 | 10.0 | 4.0 | 50.0 | 52.5 | 25.0 | 35.0 |
| Afar sites | 52.1 | 39.3 | 4.2 | 75.0 | 0.0 | 67.9 | 35.7 |
| Urban | 54.1 | 34.6 | 4.5 | 89.4 | 36.9 | 72.6 | 54.2 |
| Rural | 43.6 | 14.9 | 4.0 | 82.2 | 28.7 | 66.3 | 52.5 |
| Total | 50.3 | 27.5 | 4.3 | 86.8 | 33.9 | 70.4 | 53.6 |

Table 5.2 presents selected class-level characteristics. Across regions the mean class size ranges between 47.4 pupils per class in Amhara to 52.9 pupils per class in Somali, with rural classes being on average smaller than urban classes. Figure 5.0 reports the mean class size by site. Variation in class size between sites within a region is particularly pronounced in Afar, where mean class size ranges from fewer than 20 pupils per class in one site to almost 80 pupils per class in another.

Pupil–textbook ratios vary by both subject and location. For example, while in 70.4 per cent of classes all pupils have their own maths textbook, only 53.6 per cent of classes had one literacy textbook per child. Distribution of the newly developed maths and literacy textbooks also appears to vary by subject, with 86.8 per cent of classes using the new maths textbooks, compared with 33.9 per cent of classes using the new literacy textbooks. Hours of teaching vary between regions and urban/ rural locations, ranging from 5.1 hours per day in the Addis Ababa sites to 4.0 hours per day in Oromia, Tigray and Somali sites, and from 4.5 hours per day in urban areas to 4.0 hours per day in rural areas.

Figure 5.0. Mean class size by site


In total, 305 teachers were interviewed as part of the survey. These teachers were selected on the basis that they taught maths and/or literacy to Grade 4 and/or Grade 5 classes (the subjects in which pupils completed learning assessments).¹⁹ Table 5.3 presents data on the use of the 'self-contained' system, according to which primary-school pupils are taught all or most subjects, including maths and literacy, by a single teacher. While 44.5 per cent of all Grade 4 classes used this system (i.e. they had the same teacher for both maths and literacy), the findings ranged from zero per cent of classes in the Somali sites to 100 per cent of classes in the Tigray sites. By contrast, almost no Grade 5 classes operated the system. This pattern is expected, since Grade 5 marks the beginning of the 'second cycle' of primary school, during which pupils are normally taught by subject-specialist teachers.

Table 5.3. Use of the 'self-contained' system in Grades 4 and 5 by region

| Region | Class has same teacher for both maths and literacy | |
|-----------------------|--|------------|
| | Grade 4 | Grade 5 |
| Addis Ababa sites | 11.5 | 0.0 |
| Amhara sites | 57.9 | 0.0 |
| Oromia sites | 71.4 | 8.3 |
| SNNP sites | 56.3 | 0.0 |
| Tigray sites | 100.0 | 0.0 |
| Somali sites | 0.0 | 0.0 |
| Afar sites | 28.6 | 0.0 |
| Urban | 42.4 | 0.0 |
| Rural | 66.1 | 2.2 |
| Sample average | 44.5 | 0.8 |

¹⁹ Note that because some teachers taught one or both subjects to more than one class, and some teachers teach both maths and literacy to the same class, there is multiple matching between pupils and teachers in the data.

Table 5.4 presents selected background characteristics for the 305 teachers included in the survey. The mean age of survey teachers is 31.4 years, varying relatively little by survey region and urban/rural location. More than 50 per cent of survey teachers were male, ranging from 41.2 per cent of teachers in the Amhara sites to 60.6 per cent of teachers in the Somali sites. Greater variation is found in terms of years of teaching experience, with those teachers in the Oromia and Somali sites having just over 15 years' teaching experience, compared with approximately 7 and 9 years of experience in Afar and Addis Ababa respectively. Teachers in Oromia were both older and less educated, with just 40.7 per cent of them having completed a post-secondary or higher general qualification. By contrast, more than 90 per cent of the less experienced teachers in both Afar and Addis Ababa had completed a post-secondary or higher general qualification, a finding which probably reflects changes in education and training policies and opportunities in recent years.

Table 5.4. *Selected teacher characteristics by region and location*

| Region | Mean teacher age (years) | Male teachers, % | Mean years of teaching experience | Teacher has completed post-secondary or higher general education, % |
|-----------------------|--------------------------|------------------|-----------------------------------|---|
| Addis Ababa sites | 29.4 | 60.8 | 8.6 | 90.2 |
| Amhara sites | 32.2 | 41.2 | 10.6 | 64.7 |
| Oromia sites | 36.0 | 44.4 | 15.9 | 40.7 |
| SNNP sites | 34.2 | 59.4 | 14.5 | 56.3 |
| Tigray sites | 31.4 | 51.3 | 11.2 | 51.3 |
| Somali sites | 28.7 | 69.6 | 15.6 | 69.6 |
| Afar sites | 28.7 | 58.8 | 7.4 | 97.1 |
| Urban | 33.4 | 54.3 | 13.7 | 70.7 |
| Rural | 28.2 | 61.5 | 9.8 | 63.3 |
| Sample average | 31.4 | 57.1 | 12.2 | 67.9 |

The longitudinal nature of the survey enables us to consider instances of changes in the teachers teaching particular classes during the school year, as presented in Table 5.5. Instances of changes of teacher are perhaps surprisingly common, with 16.4 per cent of classes experiencing a change of maths teacher, and 15.4 per cent of classes experiencing a change of literacy teacher. The incidence of teacher changes is higher in rural areas than in urban areas. Further, 84.3 per cent of classes were taught continuously together during the school year, with the remaining classes being split or separated during the school year. Class splitting was particularly prevalent in rural areas (at 28.7 per cent of classes), compared with urban areas (only 8.4 per cent of classes). Teacher changes and class splitting suggest potential disruption to teaching and learning in affected classes.

We calculated the level of teacher absence for each class in maths and literacy, taking account of teacher changes where appropriate (reported as a percentage of the total days that elapsed between 1 October 2012²⁰ and the Wave 2 survey visit). This indicator provides a measure of teaching time lost due to teacher absenteeism. Significant variation is found by region, ranging from 1.7 per cent of teaching days for maths and 0.9 per cent for literacy in

²⁰ 21 January 2005, Ethiopian calendar.

the Addis Ababa sites, to 9.1 per cent of teaching days for maths and 5.6 per cent for literacy in Afar. Overall absenteeism rates, at around 4 per cent, may nonetheless be considered relatively low, based on available administrative records.

Table 5.5. *Changes to class teaching arrangements and structure during course of school year (%)*

| Region | Class maths teacher remains the same throughout school year, % | Class literacy teacher remains the same throughout school year, % | Class was taught continuously together throughout school year, % | Maths teacher absence between 1 October & W2 in class, % | Literacy teacher absence between 1 October & W2 in class, % |
|-----------------------|--|---|--|--|---|
| Addis Ababa sites | 80.9 | 95.7 | 95.7 | 1.7 | 0.9 |
| Amhara sites | 78.1 | 90.6 | 75.0 | 3.8 | 3.9 |
| Oromia sites | 73.1 | 73.1 | 80.8 | 5.4 | 6.4 |
| SNNP sites | 94.0 | 82.1 | 62.7 | 1.8 | 1.9 |
| Tigray sites | 80.0 | 70.0 | 90.0 | 4.2 | 2.8 |
| Somali sites | 82.5 | 87.5 | 100.0 | 5.8 | 7.7 |
| Afar sites | 85.7 | 92.9 | 100.0 | 9.1 | 5.6 |
| Urban | 90.5 | 90.5 | 91.6 | 2.8 | 2.2 |
| Rural | 71.3 | 74.3 | 71.3 | 6.2 | 6.5 |
| Sample average | 83.6 | 84.6 | 84.3 | 4.0 | 3.7 |

6 Conclusion

This report has provided an initial overview and summary of the sample of pupils, teachers, classes and schools included in the Young Lives 2012–13 school survey in Ethiopia. It has explored key descriptive statistics on pupils' backgrounds, enrolment, attendance and retention, on language use at home and school, and on basic school, principal, teacher and class characteristics. This section will summarise some of the key descriptive findings and highlight areas for further research.

Pupils' educational status and history

Pupils attending Grade 4 and Grade 5 classes in survey schools have diverse backgrounds and educational experiences. Approximately 73 per cent of pupils report having first enrolled in school by the age of 7, with some regional variation. The majority of pupils are in approximately the 'correct' grade for their age, with the average age of pupils being approximately 11 and 12 in Grades 4 and 5 respectively. In general, pupils in Somali and Afar are consistently older than the mean age, while those in Tigray are consistently younger, with some variation evident by site.

Survey pupils speak a wide range of languages at home, yet 70 per cent of pupils are learning in their mother tongue. This is less often the case in Afar and SNNP, a fact linked to region-specific MOI policy. In SNNP, nearly 70 per cent of pupils are learning in their mother tongue in Grade 4, but this falls to under 1 per cent of pupils in Grade 5, owing to a shift in MOI to English at the start of the second cycle of primary. In Afar, MOI policy mandates the use of Amharic from the start of the first cycle, making it the only survey region where official MOI is not the language of the majority. Across the whole sample, only 3 per cent of survey

children report speaking ‘well’ a language other than their mother tongue, and almost all of these children are based in Afar, a fact no doubt related to MOI policy in schools.

Grade repetition and drop-out can be considered to be relatively common, at 23.9 per cent and 17.3 per cent for the total sample respectively. However, once again regional variation is evident, with both phenomena being particularly low in the Somali region (12.6 and 10.6 respectively) and particularly high in Afar, where 40.2 per cent of pupils report repeating a grade, and 24.1 per cent report having dropped out.

Enrolment, attendance and absenteeism

Only 87 per cent of the pupils enrolled on the register were present at the time of Wave 1, with regional and site-level variation once again evident, such that this rate falls to below 50 per cent in one Somali site. Ninety-four per cent of those present at the time of Wave 1 remained enrolled on the register at the time of Wave 2, but only 84 per cent were actually present at the time of Wave 2. Site-level factors appeared important here, with significant site-level variation evident both between and within regions. For example, in all Tigray sites the attendance of survey pupils at survey Wave 2 was above 85 per cent in all sites, while in Afar one site had almost 90 per cent attendance, and another had less than 50 per cent attendance.

Pupil absenteeism is, on the whole, low, but site-level variation is also wide, ranging from 1.9 per cent in the Addis Ababa sites to as much as 15 per cent in one Afar site. Participation in work-related activities is prevalent among sample children and was linked by fieldworkers to non-attendance of pupils at school. Indeed, across the whole sample 68 per cent of pupils on a usual school day report spending some time on chores or caring responsibilities, 54 per cent report spending time working in the family business or farm, and 25 per cent report working for pay or a wage.

Further examination of these trends in relation to key pupil characteristics, including pupil learning levels, is a priority.

School, class and teacher quality

Schools in rural areas are typically less well equipped in terms of the availability of electricity, improved drinking water and other resources. These rural schools have fewer hours of instruction, are more likely to teach in shifts (91.5 per cent of schools versus 46.8 per cent in urban areas), and have higher levels of teacher changes in both subjects and a greater incidence of class splitting.

Class sizes are large on average, at 50 pupils per class across the entire sample, and slightly more in urban areas. This might be expected to pose a significant challenge to the quality of teaching. Access to textbooks varies widely between schools and sites, in terms of both the pupil–teacher ratio and the availability of newly developed textbooks.

Teacher experience and qualifications also vary, with urban teachers being on average more experienced and more likely to have completed a post-secondary or higher general education. Teacher absenteeism is, on the whole, low, but once again the situation appears favourable in urban areas, with urban teachers being less likely to be absent than their rural counterparts, and with Somali and Afar having particularly high rates of absenteeism.

Final thoughts

It is clear across the data that important differences exist between regions, sites and urban/rural locations. The developing regions of Somali and Afar emerge in many indicators as particularly disadvantaged, albeit often in different and contrasting ways. However, for some indicators it is specific sites in regions such as Amhara and Oromia that emerge as areas for concern. This highlights the importance of considering equity of opportunity both between and within regions, and the differential experiences of children learning in different parts of the country, which will be essential for tailoring policies to Ethiopia's diverse contexts.

Further research should focus on exploring these patterns across a more comprehensive range of indicators of pupil disadvantage, and in relation to pupil learning levels. The inclusion of non-government schools also offers the opportunity to conduct a more comprehensive comparison of government and non-government schools in selected survey sites, which will be of particular interest as the private sector expands.

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Appendix 1. Site descriptions

| Region | Cluster ID | Reference in Text | Description of site |
|-------------|------------|-------------------|--|
| Addis Ababa | 1 | AD1 | An overcrowded area in the centre of the capital city, Addis Ababa |
| Addis Ababa | 2 | AD2 | An industrial area in the southern part of the capital city, Addis Ababa |
| Addis Ababa | 3 | AD3 | A slum area in the capital city, Addis Ababa |
| Amhara | 4 | AM4 | A tourist town in the Amhara region, with some extremely poor neighbourhoods |
| Amhara | 5 | AM5 | A poor rural community in the Amhara region |
| Amhara | 6 | AM6 | A rural area near Lake Tana in the Amhara region |
| Amhara | 7 | AM7 | A rural food-insecure area in the Amhara region |
| Oromia | 8 | OR8 | A rural area near lake Ziway in the Oromia region |
| Oromia | 9 | OR9 | A drought-prone rural area in the Oromia region |
| Oromia | 10 | OR10 | A fast-growing town in the Oromia region |
| Oromia | 11 | OR11 | A relatively rich rural area in the outskirts of Debrezeit town in the Oromia region |
| SNNP | 12 | SN12 | A densely populated rural area growing enset ('false banana') in the SNNP region |
| SNNP | 13 | SN13 | A densely populated town in the SNNP region |
| SNNP | 14 | SN14 | A fast-growing business and tourist town in the SNNP region |
| SNNP | 15 | SN15 | A coffee-growing rural area in the SNNP region |
| SNNP | 16 | SN16 | A poor and densely populated rural community in the SNNP region |
| Tigray | 17 | TI17 | A drought-prone rural area highly dependent on government support in the Tigray region |
| Tigray | 18 | TI18 | An extremely poor rural area dependent on the Productive Safety Net Scheme and other government support in the Tigray region |
| Tigray | 19 | TI19 | A small, very poor town in the Tigray region |
| Tigray | 20 | TI20 | A model rural area in the Tigray region known for its success in soil and water conservation |
| Somali | 21 | SO21 | A drought-prone area where animal husbandry is the main means of livelihood for the community |
| Somali | 22 | SO22 | A drought-prone rural area affected by frequent shortages of water and grazing land. Animal husbandry is the main means of livelihood |
| Somali | 23 | SO23 | An area within the regional capital, Jijiga. Compared with other sites, the economy is stronger, consisting of trade, services, business and government employment |
| Somali | 24 | SO24 | A drought-prone rural area affected by frequent shortages of water and grazing land. The main means of livelihood for the local community are animal husbandry and farming |
| Afar | 25 | AF25 | A town about 725km from the capital city, Addis Ababa. A small power station, a health centre and various primary and secondary schools have been constructed since 2005 |
| Afar | 26 | AF26 | A better-off rural area where most households own livestock |
| Afar | 27 | AF27 | A drought-prone rural area affected by frequent shortages of water and grazing land |
| Afar | 28 | AF28 | A drought-prone urban area affected by frequent shortages of water and grazing land |
| Afar | 29 | AF29 | A drought-prone rural area affected by frequent shortages of water and grazing land |
| Afar | 30 | AF30 | A small urban town densely populated by commercial farm workers and government employees |

Young Lives Ethiopia School Survey 2012–13: Data Overview Report

This report provides an overview of the second Young Lives school survey in Ethiopia, conducted at the beginning and end of the 2012–13 academic year with nearly 12,000 primary-school children studying in Grades 4 and 5. The report is intended as a baseline descriptive report on the data. The survey was designed to allow analysis of what shapes children's learning and progression over a school year.

This second school survey extended beyond the 20 Young Lives study sites to include ten newly selected sites in the developing regions of Somali and Afar, where historically poor access to and participation in services, including education, is of particular concern to government, donors and NGOs. In each of the total of 30 sites, all schools, both government-owned and non-government-owned, were included in the school survey sample, enabling a perspective on the growing phenomenon of private schooling in Ethiopia.

Pupils in Grade 4 and Grade 5 were assessed in the core curricular domains of maths and reading comprehension at both the beginning and end of the school year. In addition, data were collected at the teacher, class, principal and school levels, for the purpose of analysing the determinants of learning progress during a single school year, i.e. providing a 'value-added analysis' (to be reported in forthcoming publications).

About Young Lives

Young Lives is an international study of childhood poverty, involving 12,000 children in 4 countries over 15 years. It is led by a team in the Department of International Development at the University of Oxford in association with research and policy partners in the 4 study countries: Ethiopia, India, Peru and Vietnam.

Through researching different aspects of children's lives, we seek to improve policies and programmes for children.

Young Lives Partners

Young Lives is coordinated by a small team based at the University of Oxford, led by Professor Jo Boyden.

- *Ethiopian Development Research Institute, Ethiopia*
- *Pankhurst Development Research and Consulting plc*
- *Save the Children (Ethiopia programme)*
- *Centre for Economic and Social Sciences, Andhra Pradesh, India*
- *Save the Children India*
- *Sri Padmavathi Mahila Visvavidyalayam (Women's University), Andhra Pradesh, India*
- *Grupo de Análisis para el Desarrollo (GRADE), Peru*
- *Instituto de Investigación Nutricional, Peru*
- *Centre for Analysis and Forecasting, Vietnamese Academy of Social Sciences, Vietnam*
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