



# Young Lives Survey Design and Sampling (Round 5)

## Ethiopia

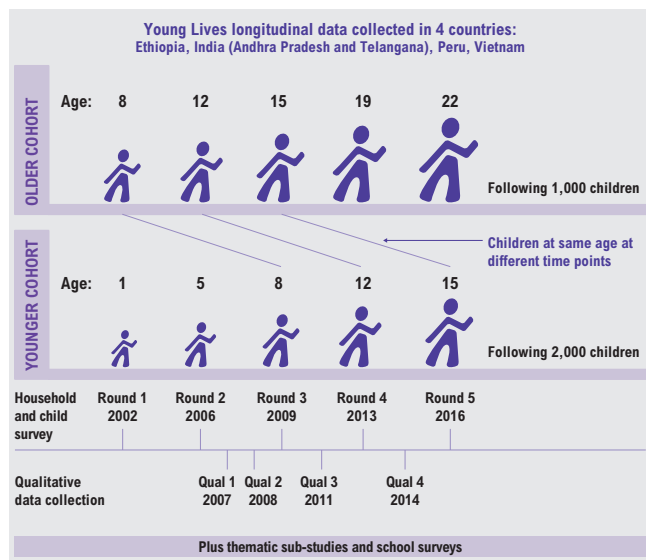
This fact sheet describes the survey methods and sample design in Ethiopia and attrition rates throughout 15 years of the study (from Round 1 in 2002 to Round 5 in 2016). It also provides information on the sites where Young Lives children live in order to contextualise the findings of the accompanying fact sheets, which present preliminary results of the fifth survey round in the four areas of: *Education and Learning, Growth and Nutrition, Youth Transitions: Skills, Work and Family Formation, and Poverty and Intergenerational Change*.

### About Young Lives

Young Lives is designed as a cohort study following the lives of 12,000 children in four low and middle-income countries – Ethiopia, India (in the states of Andhra Pradesh and Telangana), Peru and Vietnam – over 15 years. The sample in each country consists of two cohorts of children: a Younger Cohort of 2,000 children who were aged one when the first round of the survey was carried out in 2002, and an Older Cohort of 1,000 children then aged eight.

Young Lives has collected a wealth of information through a large-scale household survey of all the children and their primary caregivers, bolstered by in-depth interviews, group work and case studies with a sub-sample of the children, their caregivers, teachers and community representatives. This not only tracks the material and social circumstances of the Young Lives sample, but also captures their perspectives on life and their aspirations for the future, set against the environmental and social realities of their communities.

The fact that our work spans 15 years in the lives of these children – covering all ages from early infancy into young adulthood, when some have become parents themselves – means that we are able to examine how the lives of children, living in different circumstances and in diverse contexts, change over time. The five rounds of survey data, supplemented by four rounds of nested qualitative case studies, affords Young Lives a unique cross-country longitudinal dataset exploring the causes and consequences of poverty in childhood.

**Figure 1.** *Young Lives longitudinal and cohort study*

## Young Lives in Ethiopia

Five rounds of quantitative surveys of children, households and communities have been conducted in Ethiopia. The first round was carried out between October and December 2002 when the children were aged around 1 and 8 years of age. The subsequent surveys have always been carried out at the same time of year in 2006 (Round 2), 2009 (Round 3),

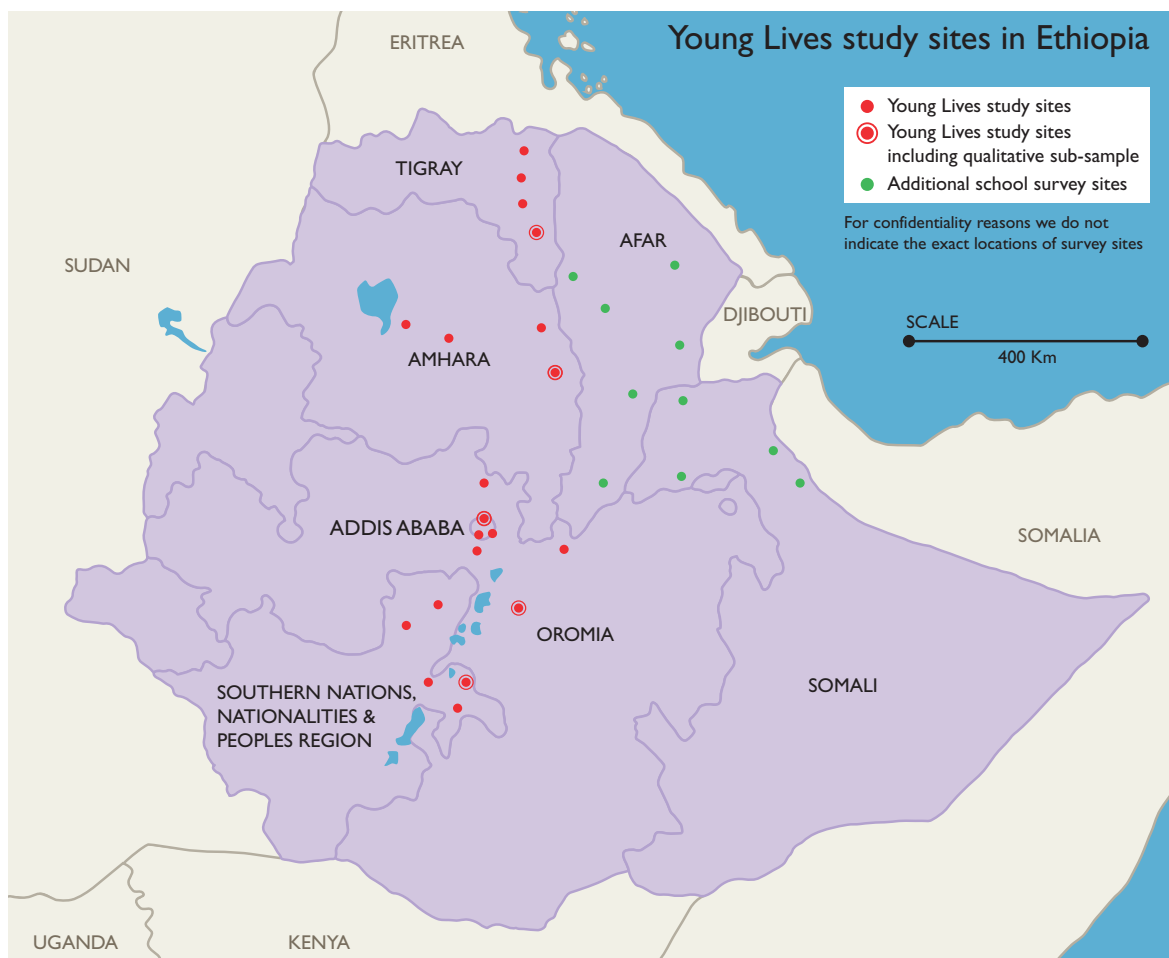
2013 (Round 4) and, most recently, in 2016 (Round 5) when the children were aged approximately 15 (the Younger Cohort) and 22 years (the Older Cohort).

## Sample design

The children were selected from 20 sentinel sites that were specifically designed in each country. The concept of a sentinel site comes from health surveillance studies and is a form of purposive sampling where the site (or 'cluster' in sampling language) is deemed to represent a certain type of population, and is expected to show typical trends affecting those people or areas.

The study sites in Ethiopia were selected in 2001 following a three-stage process based on national administrative structures. First, the regions where the study would take place were selected, then the *woredas* (districts) within each region, and then a *kebele* (the lowest level of administrative structure) within each *woreda* as a sentinel site. Finally, 100 young children and 50 older children were randomly selected within the chosen sites.

**Regions:** Under the main criterion of having national coverage, four regional states – Amhara, Oromia, Southern Nations, Nationalities and Peoples (SNNP), Tigray, and one city administration (Addis Ababa) – were selected out of the country's 9 states and 2 city administrations. The five regions selected account for 96% of the national population.

**Figure 2.** *Young Lives study sites in Ethiopia*

**Woredas:** Between three and five *woredas* (districts) were selected in each region (20 in total), with a balanced representation of poverty levels, urban and rural areas, and a selection of urban site types: capital city, intermediate city, and small urban areas (district centres). Among the *woredas* with food deficit status within each region, three with the highest proportion and one with the lowest proportion were selected.

**Kebeles:** At least one *kebele* (local administrative area) in each *woreda* was chosen. The selected community could either be considered a sentinel site in its own right or as a centre for creating a sentinel site along with adjacent *kebeles*, depending on the number of eligible households residing there.

**Households:** 100 households with a child born in 2001-02 and 50 households with a child born in 1994-95 were randomly selected in each site. If a selected family had both 1-year-old and 8-year-old children, the younger child was included since a greater number needed to be enrolled for the study.

In Round 1 there were 26 communities, which decreased to 24 in Round 2 as two communities were merged. In Round 3, the number of communities increased to 27 because three of the previous communities were split becoming six.

**Table 1. Young Lives sentinel sites in Ethiopia**

Cluster ID	Region	Anonymised name*	Short description
1	Addis Ababa	Bertukan	An overcrowded area in the centre of the capital city
2	Addis Ababa	Duba	An industrial area in the southern part of the capital city
3	Addis Ababa	Menderin	A slum area in the capital city
4	Amhara	Kok	A tourist town with some extremely poor neighbourhoods
5	Amhara	Muz	A poor rural community
6	Amhara	Enkoy	A rural area near Lake Tana
7	Amhara	Tach-Meret	A rural food-insecure area
8	Oromia	Leki	A rural area near lake Ziway
9	Oromia	Lomi	A drought-prone rural area
10	Oromia	Ananas	A fast-growing town
11	Oromia	Dinich	A relatively rich rural area in the outskirts of Debrezeit town
12	SNNP	Timatim	A densely populated rural area growing enset (false banana)
13	SNNP	Shenkurt	A densely populated town
14	SNNP	Leku	A fast-growing business and tourist town
15	SNNP	Buna	A coffee-growing rural area
16	SNNP	Weyn	A poor and densely populated rural community
17	Tigray	Zeytuni	A drought-prone rural area highly dependent on government support
18	Tigray	Selata	An extremely poor rural area dependent on the Productive Safety Net Scheme and other government support
19	Tigray	Gomen	A small, very poor town
20	Tigray	Beles	A model rural area known for its success in soil and water conservation

\*Note: Pseudonyms are used for all site names in order to protect the children's anonymity.

For more information about the country context and sentinel sites visit <https://www.younglives.org.uk/content/ethiopia>

## Comparing Young Lives to other datasets

Young Lives is not intended to be a nationally representative survey such as the Demographic and Health Survey (DHS) or Welfare Monitoring Survey (WMS). Rather, as a longitudinal study, it is intended to show changes for individuals over time and the impact of earlier circumstances on children's later outcomes, shedding light on the differences between age, language, gender, location, wealth tercile and more. A comparison to the DHS and WMS from 2000 (the year closest to Round 1 of Young Lives in 2002), indicates that the Young Lives sample includes a wide range of living standards, akin to the variability found in the Ethiopian population as a whole (Outes-Leon, 2008). Even if poor children have been deliberately over-sampled, the Young Lives sample covers the diversity of children in the country with a wide variety of attributes and experiences.

## Tracking and attrition

Sample attrition occurs when children who were interviewed in the first round of a survey are either not found or refuse to take part in later rounds. We make sure to track as many children as possible between survey rounds to minimise the risk of drop-out.

**Table 2. Attrition between Round 1 and Round 5**

	Younger Cohort	Older Cohort
Initial Sample Round 1 (2002)	1,999	1,000
Refused	10	14
Untraceable	14	14
Living Abroad	6	41
<b>Interviewed in Round 5 (2016)</b>	<b>1,812</b>	<b>814</b>
Attrition Round 1 - Round 5*	5.3%	17.7%

\*Attrition rates do not include deaths which amount to 85 (4.3%) for the Younger Cohort, and 11 (1.1%) for the Older Cohort

The attrition rate in Ethiopia is low compared to other longitudinal studies<sup>1</sup> reaching 5.3% for the Younger Cohort and 17.7% for the Older Cohort since the start of the study. The main reasons for attrition are international migration – especially important for 22-year-olds – and household moves that were impossible to track. Working with the same field supervisors since Round 1, which has enabled us to build stable relationships with the families, has been crucial to keep the 15-year attrition rate low.

1 For summary studies on attrition in developing countries, see Baird, S., Hicks, J., & Miguel, D. (2008).

**Table 3.** General characteristics of the Young Lives sample in Round 1 and Round 5

	Younger Cohort				Older Cohort			
	Round 1 – 2002		Round 5 – 2016		Round 1 – 2002		Round 5 – 2016	
	Number	%	Number	%	Number	%	Number	%
<b>Gender</b>								
Female	950	47.5	852	47.0	490	49.0	387	47.5
Male	1,049	52.5	960	53.0	510	51.0	427	52.5
<b>Religion</b>								
Orthodox	1,418	70.9	1,278	70.5	719	71.9	586	72.0
Muslim	322	16.1	300	16.6	160	16.0	121	14.9
Protestant	216	10.8	194	10.7	108	10.8	95	11.7
Other	41	2.1	38	2.1	13	1.3	12	1.5
<b>Caregiver education</b>								
None	981	49.1	940	51.9	474	47.4	395	48.5
1 to 4 years	444	22.2	416	23.0	303	30.3	247	30.3
5 to 8 years	297	14.9	280	15.5	128	12.8	109	13.4
More than 8 years	187	9.4	172	9.5	75	7.5	61	7.5
<b>Wealth Index</b>								
Bottom tercile	681	34.1	618	34.1	334	33.4	285	35.0
Middle tercile	638	31.9	593	32.7	334	33.4	278	34.2
Top tercile	658	32.9	579	32.0	329	32.9	250	30.7
<b>Location</b>								
Rural	1,299	65.0	1,195	65.9	649	64.9	545	67.0
Urban	700	35.0	617	34.1	351	35.1	269	33.0
<b>Region</b>								
Addis Ababa	300	15.0	258	14.2	150	15.0	109	13.4
Amhara	400	20.0	360	19.9	200	20.0	171	21.0
Oromia	399	20.0	364	20.1	199	19.9	166	20.4
SNNP	500	25.0	457	25.2	250	25.0	205	25.2
Tigray	400	20.0	373	20.6	201	20.1	163	20.0
<b>Total sample size</b>	1,999		1,812		1,000		814	

Note. Location, wealth, and region correspond to the status reported during the Round 1 survey (2002).

## REFERENCES AND FURTHER READING

Baird, S., Hicks, J., & Miguel, D. (2008) *Tracking, Attrition and Data Quality in the Kenyan Life Panel Survey Round 1, KLPS-1*. Center for International and Development Economics Research

Outers-Leon, I. and S. Dercon (2008) *Survey Attrition and Attrition Bias in Young Lives*. Young Lives Technical Note 5, Oxford: Young Lives.

Outes-Leon, I. and A. Sanchez (2008) *An Assessment of the Young Lives Sampling Approach in Ethiopia*. Young Lives Technical Notes 1. Oxford: Young Lives

Young Lives (2017) *Young Lives Methods Guide*, available at: <https://www.younglives.org.uk/content/our-research-methods>

## ACKNOWLEDGEMENTS AND CREDITS

The Young Lives *Survey Design and Sampling* fact sheet supports a series of fact sheets which give an overview of preliminary findings emerging from Round 5 of the Young Lives household and child survey. These fact sheets include: *Education and Learning; Growth and Nutrition; Youth Transitions: Skills, Work and Family Formation, and Poverty and Intergenerational Change*.

We thank the Young Lives participants and their families for their willingness to be part of our sample and answer our many questions. 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, EDRI or other funders.

Photo credit: © Young Lives/ Antonio Fiorente. The images throughout our publications are of children living in circumstances and communities similar to the children within our study sample.



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Young Lives is an international study of childhood poverty, following the lives of 12,000 children in four countries (Ethiopia, India, Peru and Vietnam). In Ethiopia, Young Lives is in partnership with the Ethiopian Development Research Institute (EDRI) and Pankhurst Development Research and Consulting Plc.