



The twin challenges of eliminating
child labour and achieving EFA:
evidence and policy options from Mali
and Zambia

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Working Paper

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As part of broader efforts towards durable solutions to child labor, the International Labour Organization (ILO), the United Nations Children's Fund (UNICEF), and the World Bank initiated the interagency Understanding Children's Work (UCW) programme in December 2000. The programme is guided by the Oslo Agenda for Action, which laid out the priorities for the international community in the fight against child labor. Through a variety of data collection, research, and assessment activities, the UCW programme is broadly directed toward improving understanding of child labor, its causes and effects, how it can be measured, and effective policies for addressing it. For further information, see the programme website at www.ucw-project.org.

This paper is part of the research carried out within UCW (Understanding Children's Work), a joint ILO, World Bank and UNICEF programme. The views expressed here are those of the authors' and should not be attributed to the ILO, the World Bank, UNICEF or any of these agencies' member countries.

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ABSTRACT

Child labour constitutes a key obstacle to achieving Education For All (EFA) and Millennium Development Goals in Mali and Zambia. It not only harms the welfare of individual children, but also slows broader national poverty reduction and development efforts. Children forced out of school and into labour to help their families make ends meet are denied the opportunity to acquire the knowledge and skills needed for gainful future employment, thereby perpetuating the cycle of poverty. One out of every two Malian and Zambian children aged 7-14 years work regularly in economic activity, underscoring the scale of the challenge posed by child labour in the two countries.

Understanding the interplay between educational marginalisation and child labour is critical to achieving both EFA and child labour elimination goals. This paper forms part of UCW broader efforts towards improving this understanding of education-child labour links, making use of recent empirical evidence from Mali and Zambia.

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1. INTRODUCTION

1. Child labour constitutes a key obstacle to achieving Education For All (EFA) and Millennium Development Goals in Mali and Zambia. It not only harms the welfare of individual children, but also slows broader national poverty reduction and development efforts. Children forced out of school and into labour to help their families make ends meet are denied the opportunity to acquire the knowledge and skills needed for gainful future employment, thereby perpetuating the cycle of poverty. One out of every two Malian and Zambian children aged 7-14 years work regularly in economic activity, underscoring the scale of the challenge posed by child labour in the two countries.

2. Understanding the interplay between educational marginalisation and child labour is critical to achieving both EFA and child labour elimination goals. This paper forms part of UCW broader efforts towards improving this understanding of education-child labour links, making use of recent empirical evidence from Mali and Zambia. The 2005 Zambia Labour Force Survey (ZLFS 2005)¹ and the 2005 Mali Child Labour Survey (ENTE 2005)² are the primary datasets used in the report. Both were national household surveys that collected information on children's work and related child, household and community variables.³

3. The report is structured as follows. The next section provides an overview of the child labour phenomenon in Mali and Zambia – its extent and nature, and its hazardousness. Section 3 examines child labour as an obstacle to achieving EFA, reviewing descriptive and econometric evidence of the costs of child labour in terms of school attendance, school survival and grade progression. Section 4 then looks at susceptibility to child labour and educational marginalisation, and in particular at factors influencing household decisions concerning the allocation of children's time between work and school. Section 5 concludes with a discussion of policy responses to child labour and educational marginalisation, both within and outside the education sector.

¹ The Zambia Labour Force survey (ZLFS) was carried out in 2005 by the National Statistical office in collaboration with the Ministry of Labour and Social Security. Zambia LFS 2005 was a national representative survey conducted on a sample of 8,000 households, specifically designed to analyse factor affecting the labour force in Zambia and to monitor the Key Indicators of the Labour Market (KILM). ZLFS 2005 also collected information in the following areas: education, health and safety, information and communication technology, household socio economic status. The information on children's involvement in economic activities was collected from the age of 5 years.

² The Mali National Child Labour Survey (*Enquête nationale sur le travail des enfants* (ENTE)) was carried out in 2005 by the National Statistical office (*Direction Nationale de la Statistique et de l'Informatique*) with technical and financial support from the IPEC/SIMPOC program. ENTE 2005 was based on a nationally representative sample of 4,000 household, covering approximately 10,700 children aged from 5 to 17 years. It was designed to collect information on children's work (economic and non-economic) as well as on other used of children's time. It also collected information on a range of child, household and community background variables.

³ Different survey methods and questionnaire means that the results of the two surveys are not strictly comparable.

2. CHILDREN'S WORK

2.1 Extent of children's work

4. Children's involvement in work is very common in both Mali and Zambia. An estimated 52 percent of Malian children and 48 percent of Zambia children aged 7-14 years, over 1.4 million Malian children and 1.9 million Zambian children in absolute terms, worked in economic activity⁴ during a seven-day reference period in 2005 (Table 1). These children were found overwhelmingly in family-based agriculture. An even larger proportion of children in each country spent some time each week performing *non-economic* forms of work⁵ during a seven-day reference period in the same year, as discussed further below. At the same time, school attendance in the two countries was very low. One of two Malian 7-14 year-olds, and one of four Zambian children from the same age group, were not attending school at the time of the ENTE and ZLFS surveys in 2005.⁶ Child labour as a barrier to education is taken up in detail in Section 3 of this report.

⁴ Economic activity (or economic production) is a broad concept covering all market production and certain types of non-market production (principally the production of goods for own use). It includes forms of work in both the formal and informal sectors, as well as forms of work both inside and outside family settings. In Zambia, the variable for children's involvement in economic activity is constructed as *children during the 7-day reference period (1) helping in unpaid household business of any kind; (2) doing work as a subsistence farmer (e.g. growing crops, raising cattle, weeding, harvesting etc.); (3) doing work as a learner or apprentice for a wage or salary in cash or kind; (4) catching any fish or gathering any other food for sale or household consumption; (5) doing any work for a wage, salary, commission or any payment in kind (excl. domestic work); and (6) doing any work as a domestic worker for a wage, salary, or any payment in kind.* In Mali, the same variable is constructed as *children during the 7-day reference period performing an activity for payment (cash or in kind), profit, family gain, or for personal use or consumption (including unpaid family work).* (The specific survey questions used to construct the variables are included as Annex 2 to this report.) The differences in the construction of the variable mean that estimates for involvement in economic activity for the two countries are not strictly comparable.

⁵ Non-economic production consists of activities performed by household members in service to the household and its members. These production activities comprise items such as cleaning, preparing meals and care of other household members. In Zambia, the variable for children's involvement in non-economic production is constructed as *children during the 7-day reference period engaging in housekeeping activities or household chores in own parents/guardians' home on a regular basis.* In Mali, the same variable is constructed as *children during the 7-day reference period performing household chores such as food preparation, cleaning, dishwashing, laundering, looking for or carrying water for children.* (The specific survey questions used to construct the variables are included as Annex 2 to this report.) Again, differences in the construction of the variable for the two countries mean that the estimates for involvement in non-economic production for the two countries are not strictly comparable.

⁶ School attendance refers to children attending school at the time of the survey. As such it is a more restrictive concept than enrolment, as school attendance excludes those formally enrolled in school according to school records but not currently attending. (The specific survey questions used for constructing the attendance variable are included in Annex 2 of this report.)

Table 1. Children's involvement in economic activity and schooling, 7-14 years age group, by sex and country, 2005 reference year

Activity status	Mali		Zambia	
	No.	%	No.	%
Only in economic activity	869,722	31.8	318,014	12.4
Only in schooling	806,162	29.4	1,030,305	40.3
Both activities	560,397	20.5	908,758	35.5
Neither activity	502,217	18.3	301,840	11.8
Total in eco. activity^(a)	1,430,119	52.3	1,226,772	47.9
Total in schooling^(b)	1,366,559	49.9	1,939,063	75.8

Notes: (a) Refers to all children in economic activity, regardless of school status; (b) Refers to all children attending school, regardless of work status.

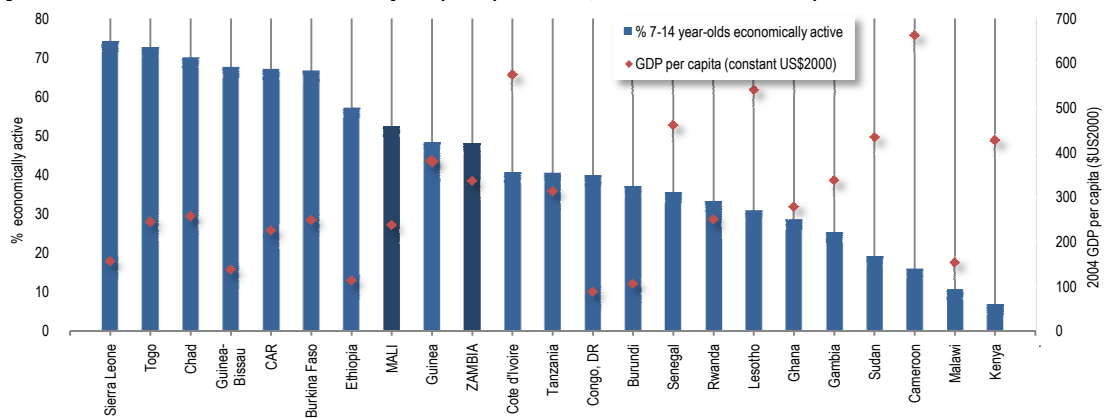
Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005)

5. Another way of viewing children's involvement in economic activity and schooling is by disaggregating the child population into four non-overlapping activity groups – children only engaged in economic activity, children only attending school, children combining school and economic activity and children doing neither⁷. This disaggregation indicates that school and work are more commonly mutually exclusive activities for Malian children – about 30 percent attend school exclusively and another 30 percent work exclusively, while only about 20 percent combine school and work. In Zambia, on the other hand, working children are typically also students – over one-third of Zambian children combine school and work, while only about 12 percent are working in economic activity without also going to school. In both countries there is a large residual group of children (18 percent of children in Mali and 12 percent in Zambia) reportedly neither working in economic activity nor attending school. Many of these children are in non-economic production (see discussion below).

6. The levels of children's involvement in economic activity in Mali and Zambia fall in the mid-range of countries in the Sub-Saharan Africa region where data are available (Figure 1). Relative to income, seven of the 13 countries achieving lower levels of children's work than Zambia have done so despite having similar or lower levels of per capita income. Mali performs slightly better relative to income, but there are nonetheless four SSA countries achieving lower levels of child involvement in economic activity with lower per capita incomes. The existence of countries doing better with fewer resources suggests that there is substantial scope for policy intervention against child labour in the Malian and Zambian context. However, as survey methodologies and exact reference periods differ, such cross-country comparisons should be interpreted with caution.

⁷ The disaggregation of child population into four non-overlapping activity group is detailed in the Annex I

Figure 1. Child involvement in economic activity and per capita income, Zambia and selected comparator countries



Notes: Estimates of child economic activity relate to different reference years and are derived from different survey instruments; cross-country comparisons are therefore indicative only.

Sources: (1) GDP per capita estimates: World Development Indicators. (2) Child involvement in economic activity: UCW calculations based on (a) Labour Force Survey 2005 (Zambia); Multiple Indicator Cluster Survey 2000 (Sierra Leone, Togo, Chad, Guinea-Bissau, CAR, Guinea, Cote D'Ivoire, Congo DR, Burundi, Senegal, Rwanda, Lesotho, Gambia, Sudan); (b) Enquête prioritaire 1998 (Burkina Faso); (c) Child Labour Force Survey 2001 (Ethiopia); (d) SIMPOC Child Labour Survey 2000 (Ghana); (f) *Enquête Nationale sur le travail des enfants, 2005 (Mali)*; (g) *Enquête camerounaise auprès des ménages II 2001 (Cameroon)*; (h) Demographic and Health Survey 2004 (Malawi); (i) SIMPOC Integrated Labour Force Survey 1999 (Kenya).

7. Who are these children at work in economic activity and where are they located? Aggregate estimates of children's economic activity mask important differences by age, sex, residence, region, in both countries. Figures 2 and 3 illustrate the main patterns.

- **Age.** Child involvement economic activity rises with age, but the available information is insufficient to provide a precise idea of the relative importance of the two most probable reasons for this, i.e., the rising opportunity cost of schooling as a child grows older, or the lack of access to schooling at the post-primary level. At the same time, the numbers of very young working children are far from negligible, particularly in Mali and in rural areas of Zambia. Around 39 percent of Malian seven-year-olds and 45 percent of Malian eight year-olds are already at work in economic activity. Similarly in rural Zambia, 48 percent of seven year-olds and 57 percent of eight year-olds must spend time each week on economic activity. These very young child workers constitute a particular policy concern, as they are most vulnerable to workplace abuses and educational marginalisation.
- **Gender.** Patterns of involvement in economic activity by sex differ in the two countries. In Zambia, gender considerations appear to play a relatively minor role in household decisions concerning child labour. The share of Zambia boys and girls aged 7-14 years in economic activity and in school (and in both or in neither) are almost equal. In Mali, by contrast, families are much more likely to involve their boys in economic activity, both in rural and urban

locations. It is worth recalling, however, that these figures relate only to work in economic activity; in both countries, girls are more likely than their male counterparts to be charged with responsibility for household chores, which are technically non-economic in nature. Work in non-economic activity is looked at in more detail below.

- **Residence.** Children's involvement in economic activity is largely a rural (agriculture sector) phenomenon in Zambia. Zambia children living in the countryside are considerably more likely than their urban counterparts to engage in economic activity, at every age and for both sexes. At the same time, urban children are more likely to attend school generally (86 percent versus 71 percent), and much more likely to attend school exclusive of work (76 percent versus 22 percent), than their rural counterparts (Annex Table A2). Rural children are also more likely to work in economic activity in Mali, although children's work involvement is also far from negligible in cities and towns. In all, 60 percent of rural Malian children work in economic activity, against 36 percent of their counterparts living in cities and towns (annex Table A2). The attendance gap by residence is also very large in Mali: 67 percent urban children attend school compared to only 42 percent of rural children.
- **Region.** Sub-national data point to large regional differences in children's work in both countries, underscoring the need for the geographic targeting of child labour elimination efforts. In Zambia, the Northern and Eastern provinces feature the highest levels of economic activity, at 79 and 77 percent respectively. In Copperbelt and Northern provinces, by contrast, less than one in 10 children are economically active. Similarly in Mali, rates of children's economic activity of 76 and 68 percent in Sikasso and Ségou respectively contrast with rates of only eight and one percent in Bamako and Kidal.

Figure 2. Children at work in economic activity, by age, sex and residence, Mali and Zambia⁽¹⁾

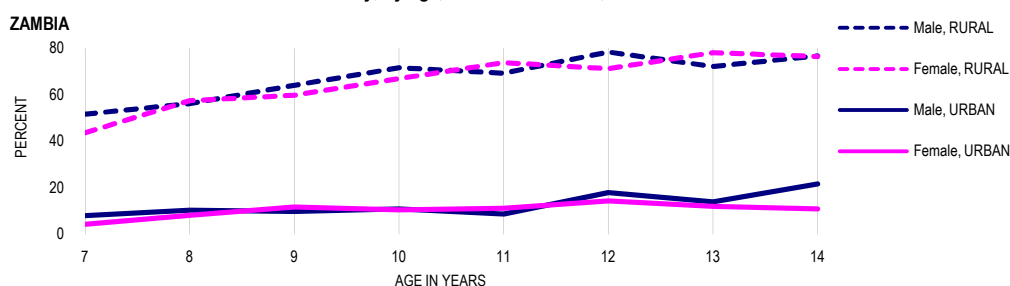
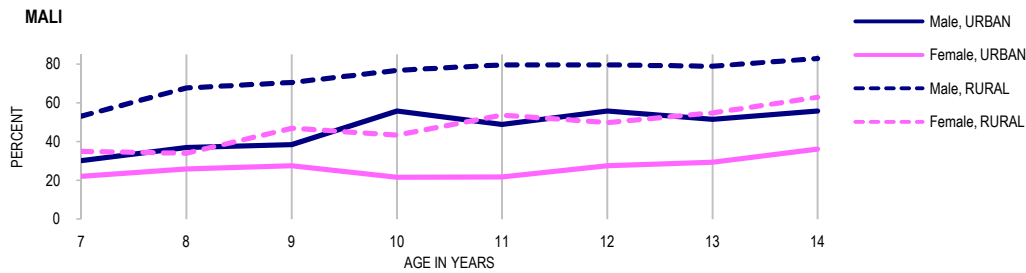
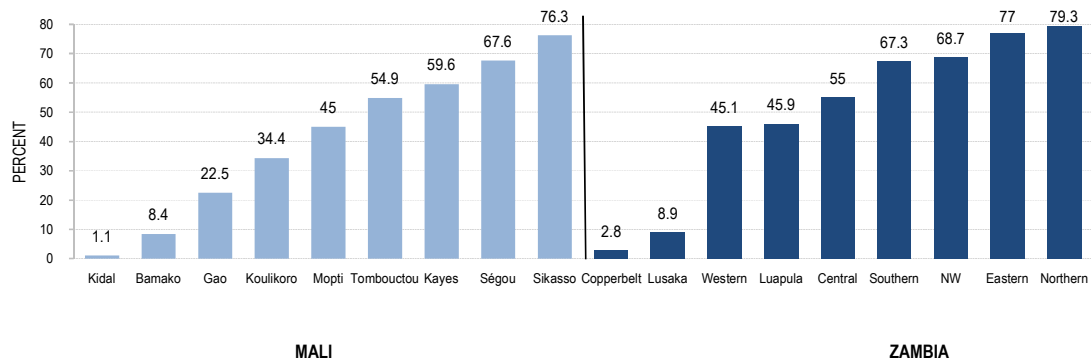


Figure 2. Children at work in economic activity, by age, sex and residence, Mali and Zambia⁽¹⁾

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005)

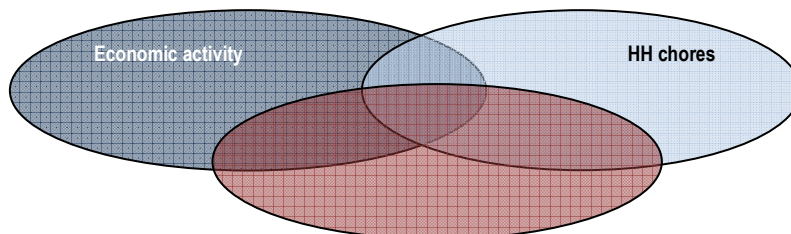
Figure 3. Children at work in economic activity, 7-14 years age group, by region, Mali and Zambia



Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005)

8. Economic activity is not the only form of work that children can perform. An even larger proportion of children is engaged in non-economic forms of work, and specifically household chores. This form of work falls outside the international System of National Accounts (SNA) production boundary and is typically excluded from published estimates of child labour. An estimated 57 percent of Zambia 7-14 year-olds and 61 percent of Malian children in the same age range was engaged in household chores in their own homes during a seven-day reference period in 2005. In both countries, involvement in household chores tends to start earlier than economic activity and is very time-intensive. Girls are much more likely to perform household chores than boys, and ignoring this form of work therefore biases estimates of children's work in "favour" of boys. Performing household chores is more common among rural children than among children living in towns or cities in both countries, not surprising given the better coverage and closer proximity of basic services in urban areas.

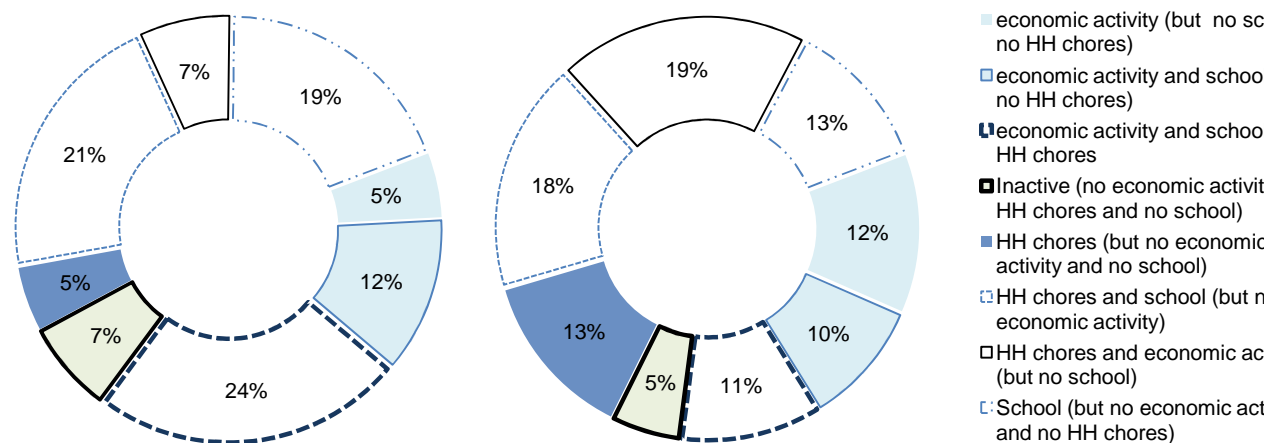
Figure 4. Children's time use



9. Considering household chores adds another layer of complexity to the discussion of children's time use, as children may perform chores in combination with school, economic activity or in combination with both (Figure 4). This more complex – but also more complete – picture of children's activities is depicted in Figure 5. One of the most striking findings when children's activities are looked at in this way is the large group of children performing, "double-duty", i.e., both economic activity and household chores. Children shouldering the burden of double work duty account for about 30 percent of all 7-14 year-olds in both countries. What is more, in Zambia, almost one-quarter of all 7-14 years combine economic activity, household chores *and* schooling, with obvious consequences on their time for study, rest and leisure. Only 19 percent of Zambia children and 13 percent of Malian children is able to attend school unencumbered by any form of work responsibilities.

10. Five percent of Malian children and seven percent of Zambian children are apparently inactive, i.e, not attending school or performing any form of work. It may be that some from this residual group are in fact involved in worst forms of child labour, unreported to surveyors either because of the stigma associated with these forms of work or because the child in question no longer lives at home. Little quantitative evidence is available in either country concerning children in extreme forms of child labour; filling this information gap should be an important priority in future research efforts.

Figure 5. Distribution of 7-14 year-olds by activity category, including involvement in household chores^(a)
(a) Zambia (b) Mali



Notes: Includes all children indicating having spent time in household chores during the reference week.

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

11. Children's involvement in economic and non-economic activities need to be combined for a measure of children's total participation in work. Children's total involvement in work calculated by simply combining involvement in economic and non-economic activity as defined in the labour survey questionnaires⁸ stood at 74 percent in Zambia and 82 percent in Mali in 2005. Girls' work involvement using this combined measure exceeds that of boys at almost every age, with differences by sex particularly pronounced in urban areas. This again underscores that using economic activity alone as the measure of work understates girls' work involvement relative to that of boys.

2.2 Nature and diversity of children's work

12. Children's economic activity is concentrated overwhelmingly in family-based agriculture sector in both countries. Almost 96 percent of total Zambian children in economic activity work in agriculture, against 3.6 percent in services and less than one percent in manufacturing (Table 2). In Mali, 83 percent of working children are in the agriculture sector, while 10 percent are in domestic service for other households, and about three percent in each of manufacturing and services. At the same time, almost all (96 percent) economically-active Malian and Zambia children work for their families as unpaid labour, with little variation by place of residence or sex in either country. Very few economically active children (two percent in Mali and less than one percent in Zambia) work as paid employees in

⁸ I.e., children performing some form of economic activity and/or some type of non-economic activity in the week prior to the surveys.

formal entities. This is important because children in the formal sector are the only ones typically accessible to labour inspection regimes.

Table 2. Children aged 7-14 in economic activity, by industry, area of residence and sex, Mali and Zambia

		Mali			Zambia		
		Male	Female	Total	Male	Female	Total
Industry	Agriculture	86.8	76.2	83.0	96.2	95.3	95.7
	Manufacturing	1.6	5.9	3.1	0.7	0.5	0.6
	Services	3.4	3.7	3.5	3.1	4.2	3.6
	Domestic service	7.6	13.7	9.8	--	--	--
	Other	0.6	0.6	0.6	0.1	--	0.1
	Total	100	100	100	100	100	100
Modality	Employee	1.9	1.2	1.7	0.7	0.6	0.7
	Unpaid family	96.6	94.6	95.9	96.8	95.8	96.3
	Self employed	1.2	2.3	1.6	2.0	3.3	2.6
	Other	0.3	1.9	0.9	0.5	0.3	0.4
	Total	100	100	100	100	100	100

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

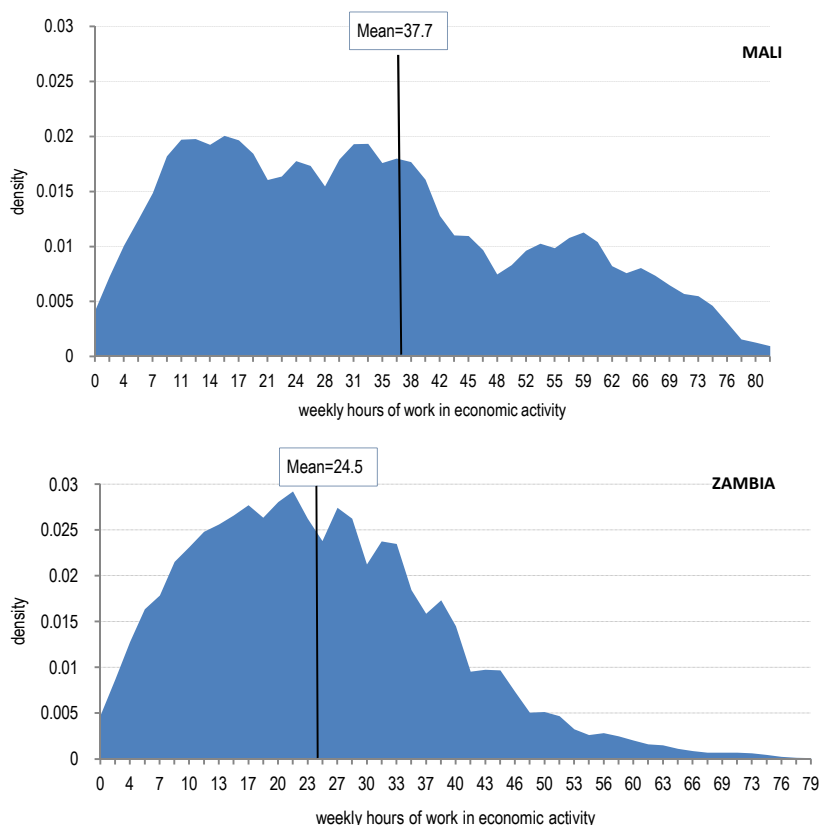
13. But beyond these general industrial categories and modalities, the household surveys unfortunately offer little detailed information concerning the nature of children's experience in economic production. The standard three-digit occupational and industrial classifications used in the surveys for collecting information on children's work were designed with the adult workforce in mind, and therefore are not the best tool for capturing the unique nature of children's work. What is more, many (worst) forms of children's work are not captured by the household surveys at all, either due to non-reporting or because the children concerned do not belong to households. Different, specialised, survey tools are needed for the purpose of providing a more complete picture of children's work.

14. The time intensity of children's work has obvious implications for the time and energy children have for their studies. Economic activity is particularly time intensive for children in Mali. Working children aged 7-11 years in Mali log an average of almost 37 hours of economic activity each week. Time intensity increases to an average of 39 hours for the 12-14 years age range, roughly equal to the weekly working hours of an adult

worker in the industrialised world. In Zambia, 7-11 year-olds average 24 working hours per week, rising to 29 hours for children aged 12-14 years. Classroom time does not appear to “crowd out” work time in Zambia - working students put in similar working hours to their peers not in school.

15. The distribution of working children by weekly working hours shows a substantial proportion of children in the “tail” of the distribution performing exceptionally long working hours, i.e., 40 or more hours per week (Figure 6). This is especially the case in Mali, where, in absolute terms, 600,000 children aged 7-14 years log at least 40 hours of work per week. The same figure for Zambia is 160,000 children. These are among the worst off working children, as their work responsibilities all but preclude their rights to schooling, study, leisure and adequate rest. Their prolonged exposure to workplace risks also undoubtedly increases their susceptibility to work-related sickness and injury. It is also worth recalling that these figures do not include time spent in household chores, as discussed below.

Figure 6. Distribution of children in economic activity by working hours, 7-14 years age group, Mali and Zambia



Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

16. Children perform both economic activity and household chores in different combinations and therefore it is necessary to consider hours in

economic activity and household chores together for a more complete picture of the time intensiveness of work. Among 7-14 year-old children involved in economic activity, the average time spent working each week rises from 24 to over 31 hours in Zambia, and from 35 to 44 hours in Mali, when the time that these children spend on household chores is also taken into consideration. Of particular concern is the almost one-third of children in each country performing double work duty, i.e., both household chores and economic activity simultaneously. These children log an average of 48 hours of total work time each week in Zambia, and 49 hours each week in Mali, again with obvious consequences for their time for study, leisure and rest.

2.3 Children's involvement in hazardous work

17. The discussion thus far has focussed on children's involvement in work generally. But to what extent is this work in some way hazardous to children? This question, critical for the purposes of prioritising and targeting policy responses to child labour, is difficult to answer unambiguously, owing to both data constraints and problems in defining hazardous work.

18. Zambia legislation contains a country-specific list of hazardous forms of work prohibited to all children below the age of 18 years.⁹ But the national list matches only imprecisely with the standard three-digit occupational and industrial categories used in ZLFS 2005, and the survey dataset contains very few or no observations for most of the 14 nationally-identified hazardous forms. This is illustrated in Table 3, which attempts to match that national list items with an appropriate industry/occupation code and then provides the number of dataset observations corresponding to each. The resulting estimate of involvement in hazardous forms reflects overwhelmingly only one category of child worker, i.e., those working for excessive hours.

⁹ In Zambia, in accordance with the national list of hazardous forms, hazardous work can be defined as work in excavation/drilling and miners and quarrymen; stone crushing; block/brick making; building; roofing; painting; tour guiding; selling/serving in bars; animal herding; fishing; working in tobacco and cotton fields; spraying of pesticides, herbicides and fertiliser application; handling farm machinery; processing in industries; and excessive hours. National legislation also prohibits work for "long hours" but does not specify specific hours limits for work.

Table 3. **Zambian national list of hazardous forms and corresponding industry/occupational codes used in ZLFS 2005**

Hazardous form	3-digit industry or occupation classification	7-14 years
1. Excavation/drilling +miners and quarrymen	711,713	0
2. Stone crushing	741, 820	0
3. Block/brick making	?	?
4. Building	959	0
5. Roofing	953	0
6. Painting	931, 939	0
7. Tour guiding	591	0
8. Selling/serving in bars	532	801
9. Animal herding	624, 629	3,305
10. Fishing	641, 649	1,027
11. Working in tobacco and cotton fields	781(tobacco preparers)	0
12. Spraying of pesticides, herbicides and fertiliser application	?	?
13. Handling farm machinery	628	0
14. Processing in industries	721-732, 749	0
15. Excessive hours		95,991
Partial total in hazardous forms identified in national list		101,124

Notes (a) Priority national hazardous sectors identified in the national list match only imprecisely with the standard 3-digit industry and occupations classifications used in ZFLS 2005. Estimates, therefore, are indicative only. (b) Some children perform both excessive hours and hazardous work. These children are not included in the total to avoid double counting.

Source: UCW calculation based on *Zambia Labour Force Survey, 2005*

19. Legislation relating to child labour in Mali contains no specific list of hazardous forms, but rather a general stipulation proscribing the employment of children under the age of 18 years in work that is too physically demanding, dangerous, or, by its nature or how it is carried out, endangers moral development. The legislation contains no further detail on workplace conditions or work types fitting within this general stipulation; developing a statistical measure of hazardous work on the basis of Mali legislation alone is therefore not possible.

Table 4. Exposure of working children to hazardous work conditions,^(a) 7-14 years age group, by sex and residence, Mali and Zambia

	Mali						Zambia					
	Urban		Rural		Total		Urban		Rural		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Male	138,721	71.2	581,488	80.6	720,209	78.6	39,884	73.5	476,152	81.7	516,036	81.0
Female	83,698	71	325,217	79.7	408,914	77.7	33,790	76.2	449,743	81.9	483,533	81.5
Total	222,418	71.1	906,705	80.3	1,129,123	78.3	73,674	74.7	925,895	81.8	999,569	81.2

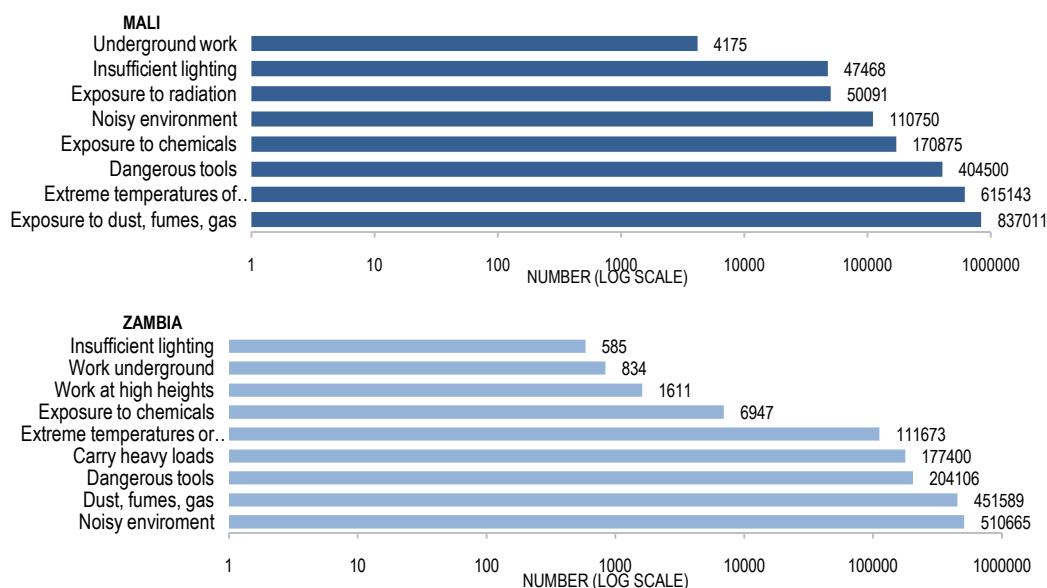
Notes : (a) This measure does not represent an estimate of hazardous work in accordance with legislation in Mali and Zambia. Rather, it constitutes an initial indication of the extent to which children are exposed to hazardous work conditions, as laid out in ILO Recommendation No. 190 and in line with the method used by the ILO in its global estimates on child labour. Hazardous work conditions include work for excessive hours (i.e. more than 43 hours per week), exposure to dust, fumes, gas, noisy environment, extreme temperatures or humidity, dangerous tools, underground work, work at high heights, insufficient lighting, exposure to chemicals, heavy loads, and radiation (Mali). They also include work in work in mining, construction, electricity gas and water (Zambia) and in handling explosives (Mali).

Source: UCW calculations based on micro-data from L'Enquête nationale sur le travail des enfants au Mali (2005) and Zambia Labour Force Survey (2005).

20. Another way of assessing involvement in hazardous work is to consider the conditions of work, in accordance with ILO Recommendation No. 190 (Worst Forms of Child Labour) (R190).¹⁰ Information on working conditions from the Mali and Zambia labour force surveys suggests very high levels of exposure to hazardous work conditions. Indeed, an alarmingly high proportion of working 7-14 year-olds in both countries – 78 percent in Mali and 81 percent Zambia – was exposed to one or more of the hazardous conditions set out in R190 (Table 4). In absolute terms, some 1.1 million Malian children and one million Zambian children were exposed to hazardous work conditions. Among serious hazards facing Malian and Zambia working children were exposure to dust, fumes and gas, use of dangerous tools, work in extreme temperatures and exposure to chemicals (Figure 7). Some 50,000 Malian working children were also reportedly exposed to radiation. Data limitations unfortunately prevent a discussion of the hazards faced by children in specific industrial sectors and work modalities.

¹⁰ ILO Recommendation No. 190 states that in determining hazardous types of work, consideration should be given, *inter alia*, to work featuring the following conditions: (a) work which exposes children to physical, psychological or sexual abuse; (b) work underground, under water, at dangerous heights or in confined spaces; (c) work with dangerous machinery, equipment and tools, or which involves the manual handling or transport of heavy loads; (d) work in an unhealthy environment which may, for example, expose children to hazardous substances, agents or processes, or to temperatures, noise levels, or vibrations damaging to their health; and (e) work under particularly difficult conditions such as work for long hours or during the night or work where the child is unreasonably confined to the premises of the employer.

Figure 7. Number of children exposed to specific work hazards, 7-14 years age group, Mali and Zambia



Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

Table 5. Involvement in economic activity and hazardous economic activity, 7-14 years age group, by region, Mali and Zambia

Country	Region	Involvement in economic activity	Involvement in hazardous economic activity	Hazardous eco. act. as a % of total eco. act.
Mali	Sikasso	76.3	65.3	85.7
	Ségou	67.6	46.4	68.7
	Kayes	59.6	53.5	89.9
	Tombouctou	54.9	31.4	57.2
	Mopti	45	36.7	81.7
	Koulikoro	34.4	22.5	64.8
	Gao	22.5	23.2	100
	Bamako	8.4	5.4	64.6
	Kidal	-	-	-
Zambia	Northern	79.3	63.7	93.0
	Eastern	77.0	73.1	94.8
	NW	68.7	63.7	92.0
	Southern	67.3	56.4	83.6
	Central	55.0	45.3	82.1
	Luapula	45.9	35.4	77.0
	Western	45.1	0.0	0.0
	Lusaka	8.9	3.8	40.4
	Copperbelt	2.8	2.2	78.8

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

21. The incidence of hazardous economic activity by region in the two countries largely tracks that of economic activity generally – it is highest (lowest) in the Sikasso (Kidal) region of Mali and highest (lowest) in the Northern (Copperbelt) region of Zambia (Table 5). The picture changes somewhat when looking at hazardous economic activity as a proportion of total economic activity, i.e., the risk of being in hazardous economic activity conditional on being in economic activity. In Mali, economic activity is most hazardous in Gao, where almost all children’s work entails exposure to hazardous conditions. Children’s work is also predominantly hazardous in nature in the Kayes and Sikasso regions. In Zambia, children’s work is predominantly hazardous in most regions. Even where children’s economic activity is least hazardous, in Lusaka, 57 percent of working children face hazardous conditions.

Table 6. **Involvement in economic activity and hazardous work, 7-14 years age group, by household income quintile**

Country	Variable	Household Income quintile				
		1-Bottom Quintile	2	3	4	5-Top quintile
Mali	Involvement in economic activity	62.0	62.4	56.1	46.5	30.6
	Involvement in hazardous work as % of those in economic activity	71.2	80.0	81.1	80.0	82.0
Zambia	Involvement in economic activity	76.1	63.3	52.2	33.9	18.2
	Involvement in hazardous work as % of those in economic activity	93.2	87.2	84.4	86.2	75.5

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

22. Descriptive data do not suggest that orphanhood leads to an appreciable increase in susceptibility to hazardous work in either country¹¹. In Mali, 83 percent of orphans are in hazardous work compared to 78 percent of non-orphans, while in Zambia involvement in hazardous work is actually greater for non-orphans than for orphans (84.2 percent against 77.5 percent). The descriptive data provide some evidence suggesting that poverty heightens the risk of involvement in hazardous work, at least in Zambia. As shown in Table 6, children from households in the lowest income quintile are not only more likely to work (see discussion in Section 4), but also more likely to face hazardous conditions in their work. Ninety-three percent of working children from the lowest income quintile households face hazardous conditions in their workplace, compared to 76

¹¹ See Annex 1, table A1.5

percent of working children from households in the highest income quintile. A similar pattern, however, does not hold in Mali.

3. CHILD LABOUR AS A BARRIER TO EDUCATION

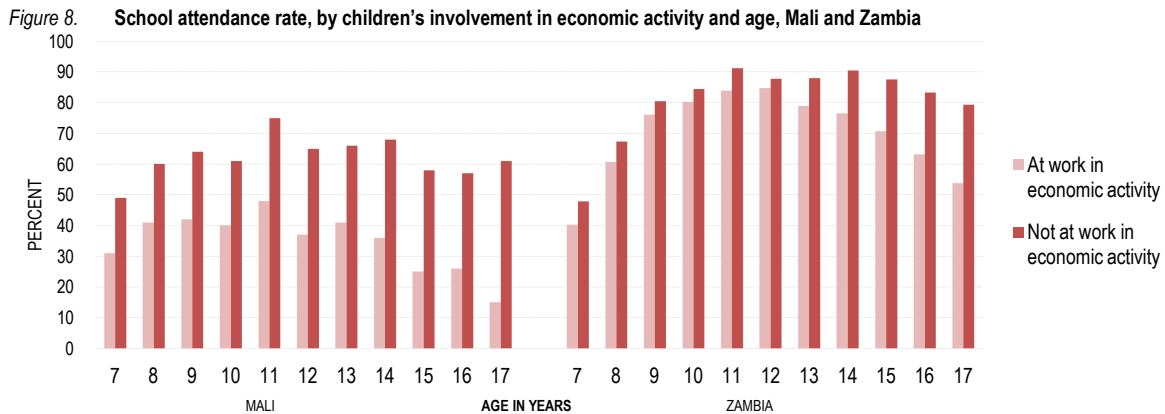
23. Involvement in work in Mali and Zambia appears to interfere with children's ability to attend and benefit from schooling, underscoring the importance of child labour as a barrier to achieving universal primary education in the two countries. Data from ENTE 2005 and ZLFS 2005 permit the generation of three core education indicators – school attendance rate, school life expectancy, and average grade for age. When disaggregated by children's work status, these indicators point to important differences between working and non-working children in terms of their ability to participate in school, and to survive and progress through the school system once there.¹² Data requirements for other indicators of school survival and progression are more stringent, in that they require information on schooling status for two consecutive school years.¹³

24. The school attendance¹⁴ of working children lags behind that of their non-working counterparts at every age in both countries (Figure 8). Child labour appears to pose a particular barrier to school attendance in Mali; there is an 18 percentage point attendance gap between working and non-working children at age seven years, rising to 32 percentage points at age 14 years. In the case of Zambia, differences in school attendance between working and non-working children are not large until the end of the first school cycle (i.e., age of 12 years) but grow thereafter. Reasons for the differences in the ability of working children to attend school in the two countries merit further investigation; one possible factor is the success of community schools in bringing older children into schooling in Zambia. Data are not available for either country on the *regularity* of school attendance, i.e. the frequency with which children are absent from or late for class, but this too is undoubtedly adversely affected by involvement in child labour.

¹² While suggestive, a causal relationship between child labour and school cannot of course be asserted from descriptive data on these indicators. Establishing causality is complicated by the fact that child labour and school attendance are usually the result of a joint decision on the part of the household, and by the fact that this decision may be influenced by possibly unobserved factors such as innate talent, family behaviour and or family preferences.

¹³ This in turn requires either two-year panel data or retrospective questions relating to school attendance (for the calculation of *dropout-out rates*) and relating to grade level (for the calculation of *transition* and *repetition rates*). The *survival ratio* requires panel data for several years (true cohort method) or data on drop-out and repetition (reconstructed cohort method).

¹⁴ School attendance refers to children attending school at the time of the survey. As such it is a more restrictive concept than enrolment, as school attendance excludes those formally enrolled in school according to school records but not currently attending. The specific survey questions used for constructing the attendance variable are included in Annex 2.



Source: UCW calculations based on micro-data from L'Enquête nationale sur le travail des enfants au Mali (2005) and Zambia Labour Force Survey (2005).

25. Involvement in *hazardous* economic activity appears to confer further educational disadvantage in terms of school attendance in Zambia. Indeed, the difference in attendance between working and non-working children lies entirely in the sub-group in hazardous work. Their school attendance is 73 percent while the attendance of other working children is 77 percent, the same as that of non-working children. This is not the case, however, in Mali, where the school attendance rates of the sub-groups of working children facing hazardous and non-hazardous conditions is the same. It may be that impact of exposure to workplace hazards also has longer term impact on the education of children, that does not show up in cross-sectional datasets.

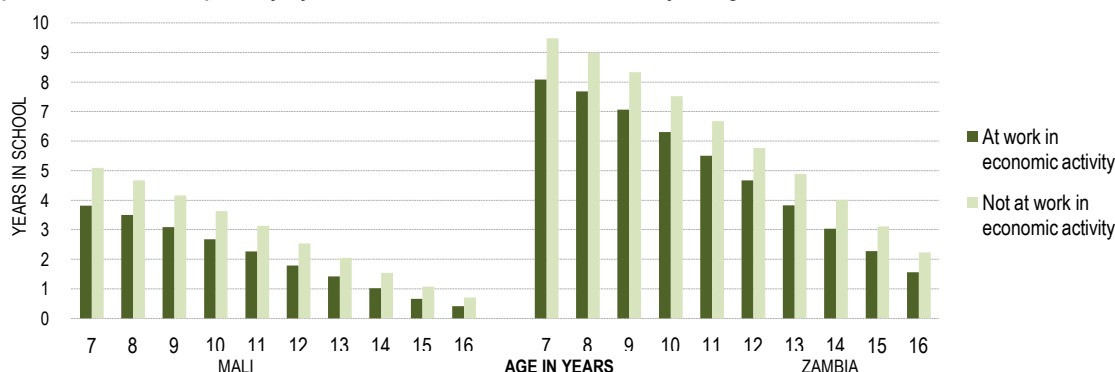
26. School life expectancy provides a measure of children's ability to persist in school.¹⁵ As shown in Figure 9, working students can expect to remain in education for fewer years at every age than non-working students in both countries, underscoring that child labour not only impacts on children's ability to enter school, but also to stay in school once there. The additional burden shouldered by working students in having to combine both work and school responsibilities makes it more likely that they drop out from school prematurely. Among children in their first year of the primary cycle, i.e., seven year-olds, school life expectancy for working students is 25 percent (1.3 years) less in Mali and 15 percent (1.4 years) less in Zambia.

¹⁵ *School life expectancy* (SLE) provides a measure of the total number of years of education that a child can expect to achieve in the future. Relatively higher school life expectancy indicates greater probability of spending more years in education, but expected number of years does not necessarily coincide with the expected number of grades of education completed, because of grade repetition. The formula of the SLE at an age a in year t is the following:

$$SLE_a^t = \sum_{i=a}^{i=n} \frac{A_i^t}{P_i^t}$$

where: A_i^t - attendance of the population of age i ($i=a, a+1, \dots, n$) in school year t ; n - the theoretical upper age-limit of schooling; P_i^t - population of age i in school-year t .

Figure 9. School life expectancy, by children's involvement in economic activity and age



Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and Zambia Labour Force Survey (2005).

27. The ability of working children to attend school appears to be conditioned by where they live within Mali and Zambia. A simple school attendance parity index¹⁶ shows that in Mali, urban working children are especially disadvantaged with respect to their non-working counterparts in terms of school attendance – their attendance is only about half that of urban children who do not work (Table 7). At the same time, while school attendance is generally lower in rural areas in Mali, the gap in attendance between working and non-working children is much smaller in rural than in urban areas. Other factors, beyond child labour, are therefore clearly important in explaining low attendance in rural areas in Mali. In Zambia, the opposite pattern appears to hold – working and non-working children attend school in almost equal proportion in urban areas, but working children lag behind their non-working peers in terms of school attendance in rural areas.

Table 7. School attendance parity index (PI),^(a) by residence, sex and region, Mali and Zambia

	Residence		Sex		Region									Total
	Urban	Rural	Male	Female										
Mali	0.55	0.79	0.61	0.56	Kayes	Koulikoro	Sikasso	Ségou	Mopti	Tombouctou	Gao	Kidal	Bamako	0.64
					0.84	0.70	0.62	1.18	0.39	0.49	0.33	0.41	0.40	
Zambia	0.99	0.90	0.94	0.98	Central	Copperbelt	Eastern	Luapula	Lusaka	Northern	North western	Southern	Western	0.96
					0.96	0.53	1.24	1.25	0.60	1.12	1.09	1.07	1.14	

Notes: (a) The school attendance parity index shows to which extent economic active children are disadvantaged in terms of their ability to go to school and is computed as the ratio of attendance rate of working children with respect to non working children..

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and Zambia Labour Force Survey (2005).

¹⁶ School attendance parity index (PI) shows to which extent economic active children are disadvantaged in terms of their ability to go to school. The formula for the index at an age a in year t is the following:

$$PI_h^t = \frac{ASAR_a^t(\text{eco. active})}{ASAR_a^t(\text{non eco. active})}$$

Where $ASAR_a^t(\text{eco. active})/(\text{non eco. active})$ is the age specific attendance ratio of economic active/non economic active children. An index value of 1, therefore, indicates attendance parity between working and non-working children.

28. Some forms of children's work also appear to interfere more with attendance than others, although again information on work type is limited to the general work classifications used in the Mali and Zambia surveys (Table 8). In Mali, children working as domestic workers and in manufacturing appear particularly disadvantaged in this context; their school attendance is only 15 percent and 36 percent, respectively, the level of their non-working peers. In Zambia, children working as formal sector employees lag behind their working peers in other sectors in terms of school attendance. Zambian children in manufacturing are more likely to be in school than non-working children.

Table 8. School attendance parity index (PI)^(a) by sector, modality and hazardousness, Mali and Zambia

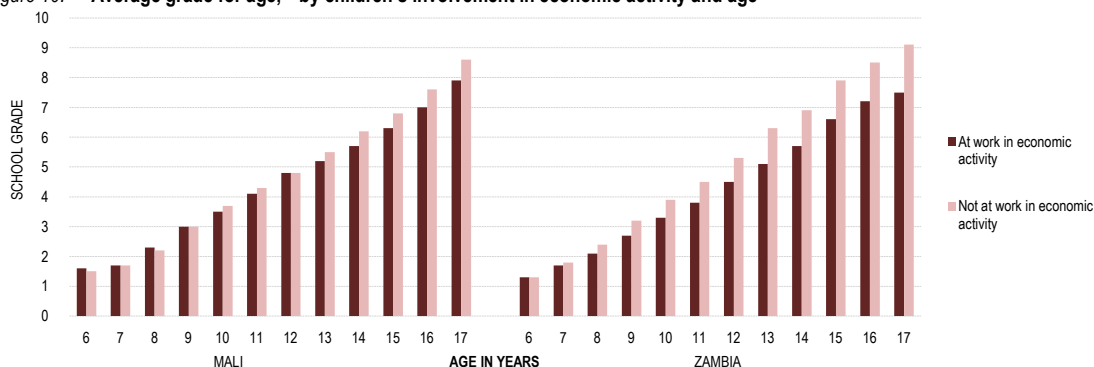
	Sector				Modality		
	Agriculture	Manufacturing	Services	Domestic service	Employee	Unpaid family	Self employed
Mali	0.64	0.36	0.97	0.64	0.80	0.63	0.59
Zambia	0.95	1.09	0.99	--	0.62	0.96	0.97

Notes: (a) The school attendance parity index shows to which extent economic active children are disadvantaged in terms of their ability to go to school and is computed as the ratio of attendance rate of working children with respect to non working children..

Source: UCW calculations based on micro-data from L'Enquête nationale sur le travail des enfants au Mali (2005) and Zambia Labour Force Survey (2005).

29. Why do some work locations and work types appear to be more of a barrier to school attendance than others? And why does work appear more compatible with schooling in Zambia than in Mali? More research is needed to improve understanding of the link between child labour and school attendance. The relative importance and interplay of work-related factors (e.g., sector, intensity, setting, work schedule, etc.) and school-related factors (e.g., duration of the school day, flexibility of the school calendar, school distance, etc.) remain poorly understood, constituting an obstacle to identifying forms of work most disruptive of schooling as well as to designing policies aimed at making schooling and (benign) work more compatible.

30. The influence of unobserved factors such as innate talent, family behaviour and or family preferences also needs to be better understood. On the basis of cross-sectional data alone it is difficult to know, for example, if it is low talent that induces a child not to go to school and hence start to work, or if it is the preference or need to work that then induces a child to drop out of school. The use of panel or retrospective data can help to address at least some of these issues and to obtain firmer results in terms of causality.

Figure 10. Average grade for age,^(a) by children's involvement in economic activity and age

Notes: (a) The average grade for age is computed as average grade completed of children currently attending school at a given age. Observations are too few to assess grade-for-age by work sector or work modality.

Source: UCW calculations based on micro-data from L'Enquête nationale sur le travail des enfants au Mali (2005) and Zambia Labour Force Survey (2005).

31. Not discussed thus far is the possible impact of child labour involvement on the ability of children to learn effectively once in the classroom. It stands to reason that the exigencies of work limit the time and energy children have for their studies, in turn negatively impacting upon their academic performance. But in the absence of test scores or some other direct measure of achievement, it is difficult to draw concrete conclusions regarding the link between school performance and child labour.

32. Data on average grade-for-age for the two countries show that working students lag behind their non-working counterparts in terms of grade progression, presumably at least in part due to poor performance.¹⁷ As shown in Figure 10, the gap in grade progression between working and non-working children already appears at age seven years in Zambia and at age 10 years in Mali, and widens steadily thereafter. By the end of the first school cycle, Zambian working children are one full grade behind their non-working counterparts. These results point to the difficulty that working children face in keeping up in the classroom with children that are not burdened with work responsibilities, and constitutes another indication of the human capital cost associated with children's work.

33. Merging the ZFLS 2005 dataset with education data from the Zambian Annual School Census¹⁸ permits a more precise identification of the impact of work on school performance (as proxied by the repetition rate) and school survival (as proxied by the drop-out rate). Multi-variate analysis¹⁹ based on this combined dataset suggests that work involvement

¹⁷ The lags in progression might also be due to higher incidence of late entry among children who are identified as workers, or to higher absenteeism among child labourers in turn leading to grade repetition.

¹⁸ Both datasets contained data by ward, providing the basis of merging the two.

¹⁹ OLS regression with robust standard errors.

is associated with higher levels of repetition, but that is the intensity of work (i.e., hours worked), rather than work involvement per se, that is most important in influencing levels of school dropout (Annex Table A6 and Table A7). The magnitude of both effects, however, is not large. An increase in the average child economic activity rate by 10 percent, for example, leads to the increase in the average repetition ratio of 0.1 percent. An increase in work intensity of one hour per day results in a 0.4 percent increase in the drop-out ratio.

4. SUSCEPTIBILITY TO CHILD LABOUR AND EDUCATIONAL MARGINALISATION: WHAT ARE THE RISK FACTORS?

34. As most primary school-aged children (excluding those that live on their own) exercise little control over their time allocations, determining why children work requires investigating why parents choose to engage their children in work rather than sending them to school or leaving them idle at home. This section makes use of econometric evidence²⁰ from Mali and Zambia to identify some of the factors influencing parents' decisions concerning their children's time use. The econometric results are provided in Table A8 and Table A9 of Annex 1 and summarised below.

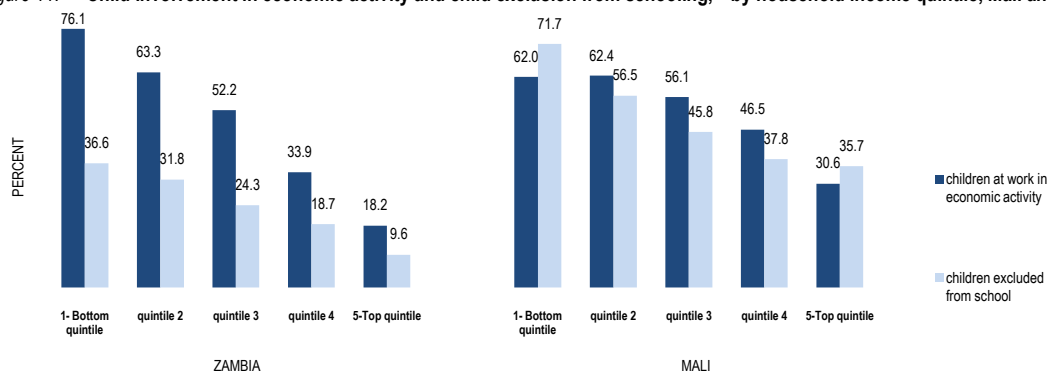
35. Household income. Simple correlations also show a strong negative relationship between household income, on the one hand, and child labour and school exclusion,²¹ on the other, in both countries (Figure 11). Econometric evidence confirms the importance of household income in decisions concerning children's time. Moving from the lowest to the second lowest income quintile, for example, reduces the probability of a child working full-time in economic activity by more than four percentage points in Zambia and by six percentage points in Mali; at the same time, it raises the likelihood of a child attending school full-time by about eight percentage points in Zambia and by six percentage points in Mali. These results underscore that children's earnings or productivity play an important role in household survival strategies among low-income families, and point to the need for some form compensatory income or earnings schemes as

²⁰ A bivariate probit model was used to jointly determine the correlated decisions on child schooling and work. A simple economic model of household behavior is used to guide the empirical specification. For detailed information on the model, see Cigno, Rosati and Tzannatos, *Child Labour Handbook*, May 2002. The analysis carried out in this section is, obviously, conditioned by the information available. Notwithstanding the extensiveness of the survey utilised, potentially important variables are missing. In particular, information on the relative price of child work is difficult to capture: indicators for returns to education, work and household chores are not easily available (for a discussion of the role played by unobservables refer to Deb and Rosati, *Determinants of Child Labour and School Attendance: The Role of Household Observables*, December 2002).

²¹ Children excluded from schooling are defined as those not currently attending school.

part of a broader effort for encouraging school attendance and discouraging children's work among poor households.

Figure 11. Child involvement in economic activity and child exclusion from schooling,^(a) by household income quintile, Mali and Zambia



Notes : (a) Children excluded from schooling are defined as those not currently attending school.

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and Zambia Labour Force Survey (2005).

36. Exposure to shocks. Socio-economic shocks are common in both Mali and Zambia and their impact on children's involvement in work and schooling is therefore of considerable policy interest. In Zambia, over one-third of 7-14 year-olds, some 888,000 children in absolute terms, belonged to a households experiencing some form of shock during the 2005 reference year (Table 9).²² Econometric evidence indicates that shocks have a strong influence on child labour and school attendance in Zambia, particularly among low income households. The loss or destruction of property appears to have the strongest impact, raising the probability of children's full-time work involvement by 14 percentage points in low-income households, and reducing the likelihood of full-time school attendance by almost six percentage points (Table 10). Crop failure and illness/injury to household member are also associated with a significantly increased probability of child labour and reduced probability of attending school, again particularly for children from poor households. These results suggest that households use child labour as a form of social insurance, helping to offset sudden losses of income arising from individual or collective shocks. They point to the need for policies aimed at reducing household vulnerability as part of a broader effort against child labour.

²² Information on shocks was not collected as part of *L'Enquête nationale sur le travail des enfants au Mali* (2005).

Table 9. Occurrence of shocks, children aged 7-14 years, by type of shock and residence, Zambia

Type of shock	Urban		Rural		Total	
	No.	%	No.	%	No.	%
		736,570	83.59	988,053	57.08	1,724,623
Death of household member	46,058	5.23	136,144	7.87	182,202	6.98
Illness/injuries	45,895	5.21	118,127	6.82	164,022	6.28
Crop failure	19,711	2.24	257,077	14.85	276,788	10.60
Flood or drought	13,999	1.59	160,796	9.29	174,795	6.69
Loss/destruction of property	11,244	1.28	20,179	1.17	31,423	1.20
Other type of shock	7,706	0.87	50,629	2.92	58,335	2.23
Any shock	144,613	16.42	742,952	42.92	887,565	33.98

Source: UCW calculations based on micro-data from Zambia Labour Force Survey (2005).

Table 10. Impact of exposure to shocks on children's time use, difference in average predicted probability calculated after bivariate probit estimation, Zambia

Type of shock	Lowest income quintile				Highest income quintile				Total			
	Economic activity exclusively	Study exclusively	Neither activity	Both activities	Economic activity exclusively	Study exclusively	Neither activity	Both activities	Economic activity exclusively	Study exclusively	Neither activity	Both activities
Death	3.02%	-2.30%	-0.54%	-0.18%	0.30%	-2.40%	0.84%	1.26%	1.82%	-2.87%	0.18%	0.86%
Illness	5.68%	-2.84%	0.44%	-3.28%	0.53%	-3.70%	2.40%	0.77%	3.34%	-3.94%	1.68%	-1.08%
Crop	4.77%	-4.78%	-2.09%	2.11%	0.56%	-4.75%	0.68%	3.52%	3.03%	-5.81%	-0.86%	3.64%
Flood/drought	-2.49%	0.59%	-0.99%	2.89%	-0.18%	1.10%	-1.31%	0.39%	-1.37%	1.02%	-1.39%	1.75%
Loss or destruction of property	13.89%	-5.75%	1.18%	-9.33%	1.51%	-9.21%	6.55%	1.14%	8.43%	-8.81%	4.38%	-4.00%
Other	2.83%	-6.04%	-4.09%	7.29%	0.51%	-5.96%	-1.07%	6.51%	2.16%	-7.36%	-3.16%	8.37%

Source: UCW calculations based on micro-data from Zambia Labour Force Survey (2005).

37. Orphanhood. Both Mali and Zambia suffer very high child orphan rates due to the HIV/AIDS crisis and understanding how orphanhood affects children's involvement in school and child labour is therefore another area of particular policy interest. Estimation results for Zambia, presented in Table 11, suggest that orphans are at significantly greater risk of being denied education,²³ with the effect largest for children who have lost both parents. Double orphans are also significantly more likely to be absent from both school and economic activity; this raises the possibility

²³ This question is taken up through estimation of a conditional (fixed effect) logit model again using the ZFLS 2005 dataset. Since there are many counterfactuals, we are looking at the variation within household. For example, let $y=1$ indicates that a child attends school and $y=0$ that he/she does not. In our case conditional (fixed effect) logit provides matching of children with $y=1$ to those with $y=0$ within each household, as explanatory variables we use the age and orphan status of a child. Note, that conditional logit models can not include observations unless there are variations in the dependent variable within group (household in our case).

that double orphans more than other children are kept at home, away from school and the workplace, to perform household chores. In Mali, orphanhood increases the risk of both child labour and schooling exclusion (Annex Table A9). This again underscores the need for increased social protection aimed at reducing the vulnerability of households affected by HIV/AIDS.

38. It is important to note the vulnerability to child labour begins with illness to the parent, and therefore the impact of the HIV/AIDS crisis on child labour and schooling is larger than these results reflect. Moreover, the surveys in Mali and Zambia did not collect information on street children or other extreme forms of child labour, where worst-off orphans are found. A recent ILO/IPEC rapid assessment in Zambia concludes that HIV/AIDS has added as much as 23-30 percent to the child labour force,²⁴ an unknown number of whom are orphans.

Table 11. Impact of orphanhood on children's involvement in school and economic activity, results of conditional (fixed effects) logistic regressions with robust standard errors^(a), Zambia

Explanatory variables		Attending school		Involved in economic activity		Neither	
		Coef.	z	Coef.	z	Coef.	z
Child age and sex	Age	3.899	13.84	2.163	3.6	-3.849	-9.47
	Age squared	-0.163	-12.52	-0.049	-1.76	0.152	8.03
	Male	0.117	1.01	0.068	0.28	-0.210	-1.23
Orphanhood status	Not living with parents	-0.894	-2.84	-0.702	-1.81	0.677	1.8
	Single orphan	-0.585	-1.93	0.116	0.2	0.169	0.35
	Double orphan	-1.110	-3.03	-1.778	-3.17	1.947	3.1

Notes: (a) Statistically significant results presented in bold.

Source: UCW calculations based on *Zambia Labour Force Survey*, 2005

39. **Education of household head.** The effect of an increase of parents' education levels on the reduction of child labour is strong and positive in both countries. Holding income and other factors constant, children from Zambian households where the head has basic education are almost seven percentage points less likely to work full-time, and five percentage points more likely to attend school full-time, than children from households where the head is illiterate. Similar results prevail in Mali. It is worth reiterating that these results are obtained holding income constant, i.e., independent of any disguised income effect. One possible explanation is that more educated parents might have a better knowledge of the returns to education, and/or be in a position to help their children exploit the earning potential acquired through education. The results underscore the value of investment

²⁴ ILO/IPEC, *HIV/AIDS and child labour in Zambia: a rapid assessment*. Paper no. 5, Geneva-Lusaka, August 2002.

in adult education as part of a broader strategy against child labour and school exclusion.

40. School-related factors. Neither of the two survey used for this report collected information regarding school quality or accessibility, but merging of the ZLFS 2005 with that of the Zambian Annual School Census permitted assessing the influence of a range of school quality variables (i.e., pupil to teacher ratio, pupil to class ratio, teacher to class ratio, and textbook to pupil ratio).²⁵ With the exception of pupil to teacher ratio (which was only marginally significant), none of the quality indicators tested was significant. This result should, however, be interpreted with caution. It might be the product of data shortcomings, or of the inadequacy of the variables used as proxies for school quality in the Zambia context. Indeed, while there is growing consensus concerning the importance of school quality, there is much less agreement concerning what quality actually means in practical terms, or concerning the characteristics of an education system of most relevance to quality.²⁶ Causal links between school quality and child labour therefore is an area requiring further investigation.

5. GETTING CHILDREN OUT OF WORK AND INTO EDUCATION, A DISCUSSION OF POLICY OPTIONS

41. The objectives of EFA and UPE (Universal Primary Education) are unlikely to be met in Mali and Zambia in the absence of major progress against child labour. The empirical results presented above highlighted that involvement in child labour is generally at a cost to children's ability to attend, perform and persist in school in Mali and Zambia, underscoring the importance of child labour a structural obstacle to EFA and UPE in the two countries. At the same time, quality education is a key element in the prevention of child labour. There is broad agreement that the single most effective way to prevent children from entering work is through extending and improving schooling, so that families have the opportunity to invest in their children's education and the returns to such an investment are greater than those associated with involving children in work.

42. As was also seen above, the causes of child labour and educational marginalisation extend well beyond the confines of the education system.

²⁵ Neither the Zambia Labour Force Survey nor l'*Enquête nationale sur le travail des enfants au Mali* collected information regarding school quality or accessibility that could be used in the econometric analysis.

²⁶ For a more complete discussion of this point, see, UCW Project, *Does school quality matter for working children? A summary of recent empirical evidence*. Draft UCW Working Paper, Rome, April 2007.

Poverty can play a particularly important role – children are often forced to work rather than attend school because their survival and that of their families depends on it. The cost of children's education in terms of foregone earnings or production is too high. Child labour may form part of a household's strategy for dealing with risk, making them less vulnerable to losses of income arising from shocks. The role of child labour as a household safety mechanism is particularly relevant in light of the unfolding global financial crisis and the on-going HIV/AIDS crisis impacting upon both countries.

43. This discussion points to the need for a policy response to child labour and education marginalisation that also extends beyond the education sector. Three policy elements are particularly relevant in this context: the first aimed at extending household social protection, the second at extending access to quality education and third at reducing the opportunity cost of children's time in the classroom. Policy measures in these three areas would together help in preventing child labour and educational marginalisation, by addressing factors influencing household decisions concerning children's school and work. But the large "stock" of children in both countries whose education has *already* been damaged by child labour also requires policy attention. A fourth element to the policy response, aimed at providing "second chance" educational opportunities, is needed for this group of children.

44. Child labour remains a generalised problem in both countries, affecting half of all children in each. Educational marginalisation too remains widespread, with one of two Malian and one of four Zambian children still out of school. The policy response to the twin challenges of child labour and school exclusion must therefore be similarly broad in scope. By far the greatest number of child labourers in both countries is found in rural, agricultural areas, and the policy response therefore needs to be tailored to these areas in particular. But urban areas should also not be neglected. Although children in urban areas face a lower overall risk of child labour, many of the worst forms of child labour are concentrated there. Children working in domestic child labour outside their own homes, who are particularly vulnerable to exploitation and abuse, is one such example. In Mali, only one in two domestic child labourers are able to attend school. Children forced to live and/or work on the streets is another example.

45. A review of core national planning documents in the two countries suggest that there remains little official recognition of child labour as a constraint to UPE/EFA and to broader national development goals. The Zambian Poverty Reduction Strategy Paper (PRSP) for the period 2002-2004 made explicit mention of child labour only as one of the cross-cutting issues to be covered in a teacher skills training programme.²⁷ The Zambian

²⁷ Technical Education, Vocational and Entrepreneurship (TEVETA) comprehensive skills training programme. Ministry of Finance and National Planning, *Zambia Poverty Reduction Strategy Paper (2002-2004)*, Lusaka, March 2002.

national Social Protection Strategy (2006-2010) makes no reference to child labour at all.²⁸ Zambia's Fifth National Development Plan²⁹ (FNDP 2006-2010) identifies child labour elimination as one of the eight focal areas for the Ministry of Labour and Social Security, but puts forth only a limited set of interventions towards this end (i.e., awareness raising, review and harmonising of legislation, enforcement, monitoring and baseline surveys). No mention of child labour is made in the education and social protection chapters of FNDP 2006-2010. Child labour is also absent from the Zambia Education Sector National Implementation Framework (2008-2010), the main education sector planning document for implementing the Fifth National Development Plan.³⁰

46. Similarly in Mali, there is little evidence that child labour concerns have been "mainstreamed" into national development planning. The country's first Poverty Reduction Strategy Paper (2002-2004) cites child labour as one of the manifestation of children's increased vulnerability and marginalisation, but contains no measures explicitly addressing it.³¹ The second Mali PRSP (2007-2011) cites progress against worst forms of child labour as one of the conditions for equitable, harmonious and sustainable development but makes no mention of child labour within the priority areas of intervention.³² The second PRSP does, however, make reference to a National Programme for Combating Worst Forms of Child Labour (2006-2010) linked to the PRSP framework (see below). The country's Plan of Action for accelerating progress towards universal primary education (Fast Track Initiative) mentions child labourers as one of the groups of vulnerable children requiring special attention but again contains no actions explicitly targeted to child labourers.³³

47. Recent national programmes of action (NPA) against child labour in the two countries are designed to begin raising the profile of child labour in national development agenda. A national programme has been in place in Mali since 2006. The programme calls for a broad cross-sectoral approach to combating worst forms, and for the creation of a supportive political, legal and institutional environment towards this end. It envisages, *inter alia*, the development of strategies for expanding educational opportunities, improving the quality of schooling, strengthening of transitional education and vocational training schemes targeting school drop-outs and ex-child

²⁸ Government of the Republic of Zambia, *Draft Social Protection Strategy*, Lusaka, April 2005.

²⁹ Also referred to as the second Poverty Reduction Strategy Paper. Ministry of Finance and National Planning, *Fifth National Development Plan*, Government of the Republic of Zambia, Lusaka, June 2006.

³⁰ Ministry of Education, *Education Sector National Implementation Framework 2008- 2010, Implementing the Fifth National Development Plan*, Government of the Republic of Zambia, Lusaka, October 2007.

³¹ Republic of Mali, *Final PRSP Poverty Reduction Strategy Paper*, document prepared and adopted by the Government of Mali, 29 May 2002.

³² Republic of Mali, *2nd Generation PRSP 2007-2011, Growth and Poverty Reduction Strategy Paper*, 20 December 2006.

³³ Ministère de l'éducation nationale, *Proposition de plan d'action pour la mise en oeuvre accélérée du PISE 2 pour la scolarisation primaire universelle*, République du Mali, Bamako, October 2006.

labourers. But implementation of the NPA relies largely on an ILO/IPEC time-bound support programme which in turn is very limited in terms of both budget (US\$3 million over 48 months) and direct coverage (7,000 children). Progress in implementing the national programme has therefore been slow. A similar national programme of action in Zambia is being developed with support from ILO/IPEC; it is scheduled for completion in 2010.

5.1 Expanding social protection

48. Prevention measures designed to stem the flow of children into work constitute the most important component of a policy response to child labour. Clearly, sustainable reductions in child labour cannot be attained without addressing the factors causing children to enter work in the first place. As primary school-aged children are rarely responsible for their own choices, the design of preventive measures requires an understanding of factors influencing household decisions relating to schooling and work. As noted above, reducing social risk is particularly important in this context. Empirical evidence presented in this report indicates that child labour is used by households to mitigate social risk, helping them offset the effects of individual or collective shocks such as illness or crop failure. Widespread poverty and susceptibility to social shocks, both exacerbated by the HIV/AIDS crisis, mean that the social vulnerability of households is very high in the two countries.

49. **Social cash transfers.** Expanding the formal social protection of vulnerable families is therefore critical to preventing child labour and school inclusion. Beyond a few limited-scale experimental initiatives, the current social safety net is very limited in both countries. A pilot social cash transfer (SCT) scheme begun in the Kalomo district of Zambia offers one potential route forward in this context.³⁴ The scheme, since expanded into an additional four districts (Monze, Kazungula, Chipata and Katete), provides regular cash transfers to incapacitated households with “limited self-help potential”, i.e., those headed by older persons taking care of orphans are a particular target. Coverage for the pilot schemes in the five districts as of mid-2008 was 3,515 households in Kalomo, 627 households in Kazungula, 3,500 households in Monze, 1,190 households in Chipata and 4,706 individuals in Katete. The Chipata SCT is the only one operating in an urban area. The Monze SCT is unique in testing “soft” conditionalities around children’s school and health clinic attendance.³⁵

50. Eligibility criteria for the original SCT scheme in Kalomo include both household “destitution” and “incapacitation”. The former is loosely defined

³⁴ Information on the SCT scheme is drawn primarily from Devereux S. and Wood D., *Zambia’s Social Cash Transfer Pilot Schemes: A Review Report for the Technical Working Group on Social Assistance*, September 2008.

³⁵ Households failing to meet conditions are followed up applying a case management approach, rather than denied future cash transfers.

as households struggling to survive, adopting negative coping mechanisms, lacking decent housing, having limited access to education and health and insufficient support from others. Household incapacitation is defined more precisely as households having no working age members who are fit for work, or a dependency ratio of unfit to fit members of three or higher; these criteria are designed to exclude households able to participate in labour-based social protection programmes such as public works and microfinance. A maximum of 10 percent households is eligible to participate in each community. The eligibility criteria used in Chipata, Kazungula and Monze are modelled closely after those of the Kalomo scheme. The Katete scheme, by contrast, involves a universal social pension available to all local residents aged 60 years or older; age, rather than household status, is the only eligibility criterion.

51. The pilot SCT schemes, and particularly the longest-running one in Kalomo District, have been subjected to a number of reviews, assessments and evaluations.³⁶ These include a final evaluation survey of the Kalomo SCT based on the monitoring and evaluation system built into the scheme.³⁷ But with only one exception – a retrospective impact study commissioned in 2007³⁸ – these studies lacked comparison groups for establishing a counterfactual, making it difficult to assert causal links between SCT interventions and observed outcomes. None of the evaluations or reviews to date has looked at child labour involvement as an outcome variable.

52. The body of evidence accumulated on the schemes to date nonetheless suggests that they have an important potential role in broader efforts towards expanding household social protection. The final evaluation survey of the Kalomo SCT found that the scheme protected household assets from resorting to ‘distress sales’ of food, permitted the accumulation of assets (especially of small livestock), and reduced average levels of household indebtedness. The survey found that fewer SCT beneficiaries in Kalomo depended on their neighbours for assistance and that the frequency and

³⁶ See, for example: (1) Schubert B. And Goldberg J., *The Pilot Social Cash Transfer Scheme Kalomo District – Zambia*. Lusaka December 2004; (2) Ministry of Community Development and Social Services, *Evaluation Study of Appropriate Models of Livelihood Strategies for Social Protection in Zambia*. Draft report, March 2007; (3) Watkins B., *Alternative Methods for Targeting Social Assistance to Highly Vulnerable Groups*. Kimetrica International Limited. Submitted to the Technical Working Group Social Assistance, Zambia, 4th February, 2008; (4) Wietler K., *The Impact of Social Cash Transfers on Informal Safety Nets in Kalomo District, Zambia: A Qualitative Study*. Social Safety Net Project, Ministry of Community Development and Social Services and GTZ, Berlin, January 2007; and (6) Ministry of Community Development and Social Services and German Technical Cooperation, *An Assessment Study in the Framework of the Development of a Social Protection Strategy: Case Studies*. Final Draft Summary Report. Submitted to the Social Protection Sector Advisory Group, February 2005.

³⁷ Republic of Zambia and German Technical Cooperation, *Kalomo Social Cash Transfer Scheme: Final Evaluation Report*. Ministry of Community Development and Social Services and GTZ, Lusaka, 2007.

³⁸ Tembo G. and Freeland N., *Impact of Social Cash Transfers on Investment, Welfare and Education Outcomes: A Retrospective Study of the Social Cash Transfer Schemes in Chipata, Kalomo and Kazungula Districts of Zambia*. Ministry of Community Development and Social Services, Lusaka, 2008.

prevalence of begging fell over the implementation period of the scheme. Investment in livelihood activities was found to have increased substantially – in terms of both the numbers of households investing and the monetary amounts invested; half of beneficiaries reported increased incomes from their investment of the cash transfers. The food consumption and the dietary diversity of cash grant recipients in Kalomo increased while reported hunger fell.³⁹

53. The 2007 retrospective impact study covering the districts of Chipata, Kaloma, Kazungula provides more robust evidence of the positive effects of the SCT schemes. The study results indicate that the SCT schemes succeeded in improving immediate household welfare – the impact of the SCTs on consumption expenditure was unambiguously positive and statistically significant in the three districts, independent of household wealth status. The Kazungula district, the poorest of the three covered, witnessed the largest consumption effects. Consumption spending by SCT households in Kazungula was 36 percent higher than by control group households in the same district, while spending on food was 64 percent higher. The retrospective study found that SCT scheme participation also had an unambiguously positive and significant impact on the value of small livestock owned in the two rural schemes (Kalomo and Kazungula), and a positive and significant impact on investment in micro-enterprises in the urban scheme (Chipata).⁴⁰

54. Education indicators also appear to have been positively impacted by the SCT schemes, suggesting that the schemes might form part of a strategy for reducing school cost barriers (see also below). The final evaluation survey of the Kalomo SCT found a statistically significant increase in enrolment among children in beneficiary households, although school enrolment was not a condition for receipt of the transfer payments. The retrospective impact study found a statistically significant increase in household spending on education in all three districts, but a significant increase in enrolment only among boys in Kaloma. In Chipata district, where the SCT scheme included an additional education premium conditional on school attendance, the retrospective study found that rates of absenteeism declined significantly for both male and female children, independent of asset wealth category, and that household spending on education was almost double in SCT households compared to control group households. Significant declines in absenteeism were also found among children in asset poor households in Kalomo and among girls in asset non-poor households in Kazungula. The educational impact of the Monze SCT

³⁹ Results reported are drawn primarily from a summary of the survey results contained in Devereux S. and Wood D., *Zambia's Social Cash Transfer Pilot Schemes: A Review Report for the Technical Working Group on Social Assistance*, September 2008.

⁴⁰ Results reported are drawn primarily from a summary of the retrospective impact study in: Ministry of Community Development and Social Services, *Wahenga.brief*, Issue no. 17, Regional Hunger & Vulnerability Programme (RHVP), February 2009.

scheme, which also contains soft conditionalities relating to education, has not yet been assessed.

55. Community-based social safety mechanisms. Developing and strengthening community-based social safety mechanisms will also be important to reducing household vulnerability. Community-based measures such as micro health insurance plans, community savings groups, and micro-credit initiatives, should be promoted and expanded, especially targeting poorest households. The capacity of community based care initiatives supporting those who look after children made vulnerable by HIV should be also strengthened, to ensure that the burden of care is removed from children themselves. The community schools initiative in Zambia provides a valuable basis for building other community efforts in the country; community-level mobilisation and organisation remains weaker in Mali.

5.2 Extending school access and raising school quality

56. A policy response to child labour and school exclusion also requires addressing the school-related factors influencing parents' decisions to involve their children in work rather than in school. Evidence indicates that parents can send their children to work because schools are inaccessible, or are of poor quality, and therefore not seen as being worth the investment of their children's time. This underscores the need to address both the "access" and "quality" barriers to children's schooling in the two countries, particularly in rural areas, where levels of child labour are highest and progress towards extending schooling has been slowest. Efforts in this context are already underway in both countries as part of broader education reform programmes; Mali and Zambia are both part of the Fast Track Initiative (FTI), an international partnership aimed at accelerating progress towards the goal of universal primary education in the participating countries.⁴¹ In neither country, however, are child labour concerns systematically integrated into broader EFA and UPI efforts, as noted above.

57. Community schools for addressing access barriers. The possibility of schooling as an alternative to work does not exist in many rural communities in the two countries, simply because school facilities remain lacking. In Mali, for instance, 39 percent of rural children live more than 30 minutes' travel distance to the nearest school. At the same time, 20 percent of grade one students attend schools that do not cover the first six grades schooling. This highlights the need to accelerate on-going efforts aimed at extending primary school coverage in rural areas. School expansion efforts require needs-based criteria to ensure that the most disadvantaged and under-served groups are reached first.

⁴¹ Zambia's Education Sector Plan was endorsed by the Fast Track Initiative in October 2008;

58. Experience in Zambia points to the important potential of community schools in this context.⁴² The number of community schools in the country grew to an estimated 3,000 in 2004, with an estimated total enrolment of approximately 500,000,⁴³ accounting for 25 percent of overall enrolment in basic education. The community schools have been particularly effective in reaching children orphaned by the HIV/AIDS epidemic and other vulnerable, hard-to-reach groups with schooling. According to the Ministry of Education, orphans accounted for 13 percent of public school students but almost one-third of community school enrolment in 2004. Other evidence shows that community school students are from poorer households – less than one-third of community school families, for example, live in permanent structures against 46 percent of public school families, while students attending rural community schools are 13 percent more likely than their public school counterparts to never have breakfast. Over-age students are also much more common in community schools; Ministry of Education figures indicate that more than half of community school students are over the age of 14 compared to 28 percent of public school students.

59. The community schools fall into three broad categories: those launched by the community and run by a Parent Community School Committee (PCSC); those started and supported by an NGO or faith-based organisation with the intention of eventually turning it over to a Parent Community School Committee (PCSC); and those launched by individual and typically run more like private schools with little community involvement. A school is formally recognised and registered by the ZCSS or Ministry of Education if it enrolls children who (a) have never been to school but are older than the age of entry to basic education; (b) have no other educational alternative in the community; (c) are orphans or otherwise vulnerable children; or (d) are disadvantaged with regards to access to the school system or cannot pay school fees. The teachers are mainly from the community, and are often untrained and unpaid. Only 16 percent have attended teacher training college against 84 percent of their colleagues in the formal system.

60. Data on school performance suggest that the community schools do not provide an inferior educational experience for students, a concern often cited by critics of community schooling schemes. Indeed, according to a comprehensive sample-based assessment of student learning undertaken in 2003 by the Examinations Council of Zambia, community school students actually outperform their public school counterparts in some learning achievement measures. In 2003, 29 percent of community school students met minimum proficiency in English compared to only 18 percent of public

⁴² Information presented on Zambian community schools is drawn primarily from: (1) USAID, *Meeting EFA: Zambia Community Schools: Case Study*, undated; and (2) Cashen L. et al, *Educating children out of the system: the community schools movement in Zambia*. Report commissioned by UNICEF, undated.

⁴³ Estimates are based on data from Zambia Community Schools Secretariat (ZCSS); Ministry of Education figures are somewhat lower, owing in part to the failure of many community schools to return their annual school census forms.

school students, and in mathematics, 46 percent of community school students met minimum proficiency compared to 43 percent of public school students. It should be noted, however, that the assessment included only community schools that were “relatively stable and enduring schools with fairly sizable enrolments”, and the results therefore may not be representative of community schools as a whole. The completion rate for community schools is 72 percent, the same is that for public schools. At the same time, per unit cost measures are much lower for community schools: recurrent cost per student are \$39 in community schools versus \$67 in public schools; costs per completer, \$376 versus \$655; and cost per student meeting minimum standards, \$885 versus \$1,845.

61. Addressing quality barriers. There is a recognition in both countries of the general need to improve school quality, in order that schooling is seen by parents as a viable and worthwhile alternative to child labour. Although measurement issues make the school quality-child labour link difficult to demonstrate empirically for Mali and Zambia (see previous discussion), research elsewhere suggests that quality considerations can be important in decisions concerning child labour.⁴⁴ Key “quality” barriers to schooling in the two countries include inexperienced or poorly-trained teachers, overcrowded classrooms, inadequate school facilities and curricula ill-suited to the realities outside the classroom. There also remains an emphasis on rote learning, with limited opportunities for active participation on the part of the students. Measures addressing quality feature prominently in education reform plans of both countries but now need to be operationalised across the education systems. The plans emphasise the importance strengthening systems of pre- and in-service teacher training, and of shifting experienced teachers to the critical first years of primary education. They also call for continued emphasis on curricular reform, and for introducing into the curricula issues of relevance to children’s lives, such as child labour and other social concerns, in an age-appropriate manner. They contain numerous quality-oriented initiatives such as the *Conseillers Pédagogiques* (CP) in Mali, providing specialised support to ensuring quality standards in individual schools.

62. Extending educational opportunities to young children and adults. Extending educational opportunities to children prior to primary education and to adults is also of direct relevance to efforts against child labour. Empirical evidence elsewhere⁴⁵ indicates that early childhood education (ECE) substantially lowers the risk of child labour and increases the likelihood of school attendance at later ages. Pre-primary education makes the transition to primary school easier, and makes it more likely that children will persist in schooling rather than enter work prematurely.

⁴⁴ For a more complete discussion of this point, see, UCW Project, *Does school quality matter for working children? A summary of recent empirical evidence*. Draft UCW Working Paper, Rome, April 2007.

⁴⁵ See, for example, UCW project, *Children’s work in Cambodia: A challenge for growth and poverty reduction*. Inter-agency report on child labour in Cambodia. Phenom Penh, 2006.

While some ECE programmes are running in Mali and Zambia, they cover only a very small proportion of children. There is a need therefore, to significantly extend ECE within broader efforts towards UPE. The evidence supporting the role of adult – and particularly mothers’ – education in promoting school attendance and reducing child labour supply is also very strong. Developing and expanding efforts in promoting good parenting, functional literacy and numeracy, work-related skills training and basic education equivalency programmes are all important in this context. Rural areas, where illiteracy is highest, again should be prioritized.

5.3 Addressing the opportunity costs of schooling

63. Beyond these general education reform efforts, additional, targeted, measures are needed to account for the indirect or opportunity costs associated with children’s school attendance. Parents often choose work over schooling for their children because they cannot afford to renounce their children’s earnings or production, even in the presence of schools of good quality. Beyond some limited-scale pilot measures, education reform efforts in the two countries place relatively little emphasis on addressing the indirect costs of schooling. Policy experience from elsewhere points to two ways forward in this context. The first involves school attendance incentives designed to directly compensate families for the lost earnings from their children; the second involves flexible schooling mechanisms aimed at making school more compatible with the exigencies of light work. Expanding access to basic services is also relevant in this context, as this helps to reduce the value of children’s time outside the classroom.

64. **School attendance incentives.** The empirical results presented in this report suggest that school incentive schemes that provide cash or in-kind subsidies to poor children conditional on school attendance offer a promising route to extending participation in school. These transfers differ from conventional scholarships in that their primary purpose is encourage enrolment and only secondarily to allow talented children or young people of modest means to obtain an education. What these schemes do, essentially, is compensate families for the direct and indirect costs associated with children attending school rather than working. They can increase schooling directly by providing poor families with additional resources (i.e. income effect), as well as indirectly by compensating parents for the foregone economic product from their children’s labour and thus reducing child work (i.e., substitution effect).

65. The Mali “Bourse Maman” initiative offers one possible model in this context. The initiative, being implemented on a pilot scale in five villages in the Mopti and Kayes regions, offers mothers regular cash transfers conditional on their children’s regular school attendance throughout the school year. The project is financed by UNICEF and is implemented in remote rural zones, difficult to reach by school administrators, where

conditions are made precarious by low rainfall and frequent drought. An external evaluation of the initiative commissioned by UNICEF in 2006 found a dramatic and sustained impact on both enrolment and absenteeism at the project sites. Information collected from interviews with participants at project site at Sénoassa in the Mopti region corroborates the evaluation results. Among other results, participants cited a tripling of enrolment, from 94 children in five classes in 2002 to 275 children in six classes in 2007, and overcoming the problem of unauthorised absences from class. Participating mothers in Sénoassa also underscored the positive impact of additional household resources, which enabled them to pay for school books and pens and other out-of-pocket schooling costs. But the Bourse Maman initiative remains very limited in scale, and further experience will be needed to assess its potential as part of national efforts towards UPE.⁴⁶

66. Flexible schooling measures. Extensive international policy experience highlights of potential of flexible schooling measures in raising attendance and reducing drop-outs through making school more accommodating of the exigencies of light work. These measures can take various forms, including setting daily school hours to accommodate daily work schedules; setting the yearly academic calendar to reflect local conditions, e.g., agricultural seasons; adding additional school shifts during off-work hours; introduction of independent study modules to compensate for class time lost to work; and introduction of mobile schools to reach nomadic children. Such measures have particular potential among children working in rural agricultural areas; school attendance for these children stands at only 38 percent and 73 percent in Mali and Zambia respectively, making this group a special priority.

67. Many flexible schooling elements have been integrated into the community schools initiative in Zambia (see also previous discussion) and in Mali. These schools, run by local community-based organizations, meet the basic learning needs of some of the most vulnerable and disadvantaged groups of children in a environment designed for local exigencies including for agricultural work. A system of mobile schools for nomadic children has been introduced in Mali, but the system remains very limited in scale.

68. Examples of flexible schooling initiatives elsewhere also offer possible models for Mali and Zambia, although caution must be exercised in ensuring these schemes are not used as a justification for child labour or for making child labour socially acceptable. Rather, their aim should be to ensure that the necessity of light work does not preclude school attendance. The BRAC program in Bangladesh is probably the best known scheme. In this program, school times are set by local parents, and the school calendar is adapted to fit local considerations such harvest seasons. In Guatemala, one measure allows children who spend the morning working on farms to

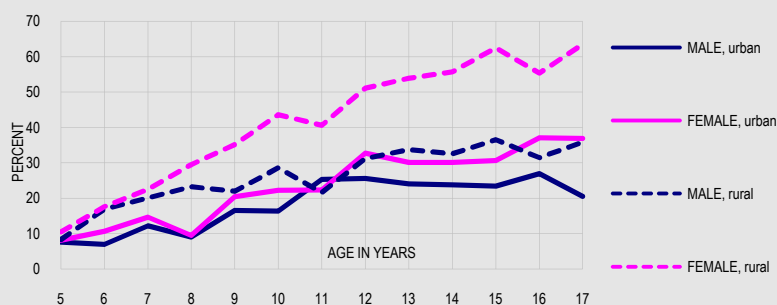
⁴⁶ P. Perezniето and Violet Diallo V., *La Protection Sociale et les Enfants en Afrique de l'Ouest et du Centre : Etude de Cas du Mali*. 2è version, Overseas Development Institute, London, Septembre 2008.

begin school later in the day, with the fewer class hours compensated for by more time on independent study. Another allows students to complete 1,000 hours of schooling with no time restriction to get primary school certification. The Peru Child and Adolescent Code guarantees special school schedules that allow children who work to attend school regularly. A number of Peruvian schools have established multiple shifts – morning, afternoon and night – to allow working children to fit schooling into their work schedules, and teachers are charged with providing extra attention to children who lag behind because of work.

Box 1. Children's involvement in water collection in Zambia

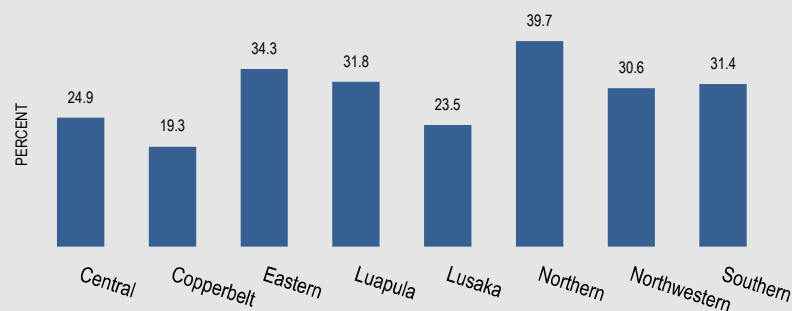
Water collection constitutes a particularly important forms of girls' work in rural areas. At the age of seven years, almost one-fourth of rural girls must carry water regularly for their household, rising to one-third by the age of nine years, and to one-half by the age of 12 years (Figure B1). They perform this task for an average of 59 minutes each day, by no means insignificant given the physical exertion required. Involvement in carrying water is lower among boys and urban girls, but is nonetheless also common among these groups. Child involvement in water collection is highest in the Northern province, but is also widespread in the other provinces of the country (Figure B2).

Figure B1. Children's involvement in water collection, by age, sex and place of residence, Zambia⁽¹⁾



Source: UCW calculation based on Zambia Labour Force Survey, 2005

Figure B2. Children's involvement in water collection, 7-14 years age group, by province, Zambia⁽¹⁾



Source: UCW calculation based on Zambia Labour Force Survey, 2005

Note: The technical classification of water fetching as an economic or non-economic activity remains an area of debate. A strict interpretation of the System of National Accounts (SNA) (rev. 1993) would place water fetching in the category of economic activity, and specifically own-account production of goods. However, in most published statistics on child economic activity and child labour, including ILO/IPEC global estimates, water fetching is reported as part of non-economic activities (household chores), and this is the convention adopted in this report. The Zambia Labour Force Survey includes water collection as one of the work categories under a general question on involvement in household chores and also contains a separate question specifically on water collection. It is the response to the latter question that are reflected in the figures above.

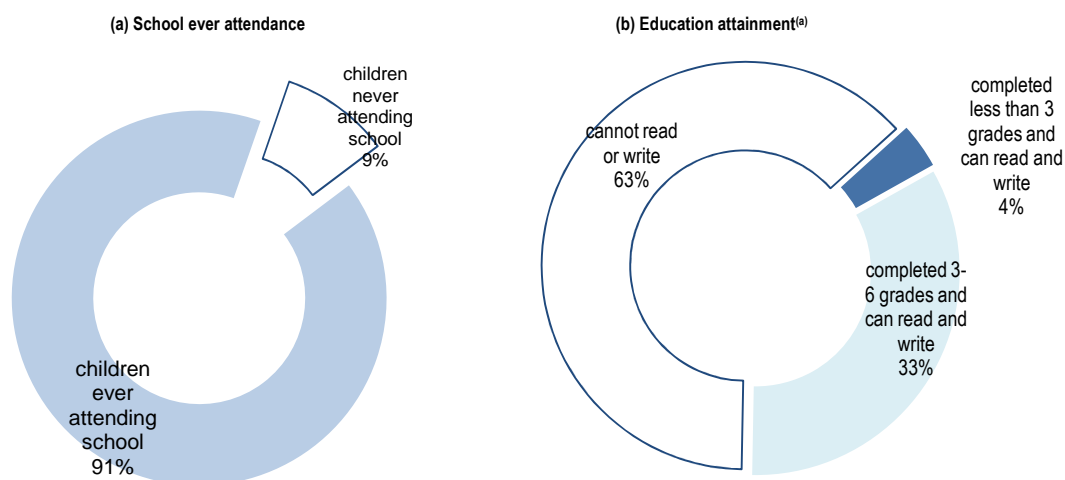
69. Improving access to basic services. Evidence suggests that services access can have a dramatic impact on school attendance and child labour rates.⁴⁷ This is because the availability of basic services can affect the value of children's time and, consequently, household decisions concerning how this time is allocated between school and work. Water access is particularly important in this context. In both Mali and Zambia, a significant amount of children's domestic work in rural areas and urban informal settlements involves the collection of water from locations often distant from their homes, reducing children's time and energy for schooling. Econometric evidence from Mali indicates the impact of water access on children's time is dramatic: holding other factors constant, providing a household with ready water access increases the probability of full-time school attendance by 20 percentage points while at the same time reducing the probability of involvement in child labour (Annex Table A9). In addition to its health and other social benefits, therefore, expanding access to basic services is an important strategy for getting children, and particularly girls, into school and out of work. Both countries need to accelerate efforts aimed at increasing the number of water sources for households, and to innovate low cost ways to bring safe water closer to households.

5.4 "Second chance" measures

70. Children's levels of educational attainment and literacy are very low in both Mali and Zambia, at least in part due to the exigencies of work. Both countries feature a large "stock" of children never having benefited from education. Almost 10 percent of Zambia 9-17 year-olds, over 280,000 in absolute terms, have never attended school. A further 149,000 children from this age group with past schooling experience (but not currently enrolled) are unable to read and write. Similarly in Mali, over 38 percent of children from the same age group have never entered school (Figure 12).

71. These figures underscore the importance of expanding and accelerating on-going efforts in the area of remedial or "second chance" education, as children with little or no schooling will be in a weak position in the labour market, at much greater risk of joining the ranks of the unemployed and the poor. If left alone, these children and youth are likely to be in need of other (more costly) remediation policies at a later stage of their lives. Again, beyond limited pilot scale efforts, the issue of second chance learning is accorded little emphasis in the education reform plans of the two countries.

⁴⁷ In Yemen, for example, connection to a water network increases the likelihood of attending school by over nine percentage points. For girls, the water availability is an especially important factor, raising the likelihood of their attending school by 11 percentage points and reducing the likelihood that they work by four percentage points. For further details, see Guarcello L., Mealli F., and Rosati F.C., *Child labour and access to basic services: Evidence from five countries*, UCW Working Paper, Florence, November 2003.

Figure 12. Children requiring remedial education, 9-17 years age group,^(a) Zambia

Notes: (a) Among children ever attending school but NOT currently attending school

Source: UCW calculations based on *Zambia Labour Force Survey, 2005*

72. Second chance programmes are based on the premise that working children are often difficult to insert directly (back) into the formal education system because of their age, different life experiences and lack of familiarity with the school environment. Their lack of formal education also frequently leaves working children too far behind their peers academically to catch up on their own. Second chance education programmes offer children who have never enrolled in school, or who have dropped out, a “bridge” to successful integration or (re-integration) in the formal school classroom. They are critical to ensuring that these children, once in school, remain there, and are able to learn effectively.

73. Again, the Zambia community schools network provides a useful model in this regard, with substantial further scope for expansion and strengthening. These schools, run by local community-based organizations, meet the basic learning needs of some of the most vulnerable and disadvantaged groups of children in a local environment. Many of the students are AIDS orphans who have lost either one or both of their parents and live in household too poor to send these children to government schools. Many are also older children with little or not previous schooling experience. Some of the schools used the SPARK syllabus – Skills, Participation, Access, and Relevant Knowledge – designed to provide 9-16 year-olds with a complete primary education in only four years, as opposed to the seven years required for the national curriculum. Others use the national curriculum, centred on seven subjects for seven years of education, or a combination of the SPARK syllabus, the national curricula and locally-relevant topics.⁴⁸

⁴⁸ *Educating children out of the system: the community schools movement in Zambia*, report commissioned by UNICEF, undated.

74. The community development education centres (*centres d'éducation pour le développement- CED*) in Mali represent another model. The centres offer second chance learning to children and young persons (9-15 years of age) who have dropped out of or never entered formal schooling. Initiated in 2002 with 592 schools, the scheme had expanded by 2004 to 706 schools (17,318 students) in previously unserved rural and periurban areas throughout the country.⁴⁹ The centres provide a six-year study programme, the first four covering the core school curriculum in an abbreviated fashion and the latter two providing pre-professional training. They aim at providing graduating young persons with the basic skills they need to successfully integrate into community life and to continue with advanced learning. Community managed, the CEDs are closely linked with the local cultural and economic environment; daily schooling hours and the academic calendar are set taking into account the domestic responsibilities of students (and particularly of female students). The monitoring and evaluation system associated with the CED scheme remains incomplete, meaning that there is little concrete information on the impact of the programme or on how learning outcomes of CED students compare with those of students in the formal school system.

⁴⁹ Ministère de l'Éducation nationale de la République du Mali et UNESCO, 2006.

ANNEX 1: DETAILED EMPIRICAL RESULTS

Table A1. Child activity status, 7-14 years age group, by sex and country, 2005, Zambia

Activity status	Mali						Zambia					
	Male		Female		Total		Male		Female		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Only in economic activity	510,774	36.2	358,948	27.0	869,722	31.8	172,600	13.3	145,414	11.5	318,014	12.4
Only in schooling	357,505	25.3	448,657	33.8	806,162	29.4	512,889	39.6	517,416	40.9	1,030,305	40.3
Both activities	397,030	28.1	163,367	12.3	560,397	20.5	462,556	35.7	446,202	35.3	908,758	35.5
Neither activity	145,237	10.3	356,980	26.9	502,217	18.3	147,196	11.4	154,644	12.2	301,840	11.8
Total in eco. activity^(a)	907,804	64.3	522,315	39.3	1,430,119	52.3	635,156	49.0	591,616	46.8	1,226,772	47.9
Total in schooling^(b)	754,535	53.4	612,024	46.1	1,366,559	49.9	975,445	75.3	963,618	76.2	1,939,063	75.8

Notes: (a) Refers to all children in economic activity, regardless of school status; (b) Refers to all children attending school, regardless of work status.

Source: UCW calculation based on Zambia Labour Force Survey, 2005

Table A2. Child activity status, 7-14 years age group, by residence and country, 2005, Zambia

Activity status	Mali						Zambia					
	Urban		Rural		Total		Urban		Rural		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Only in economic activity	174,248	20.2	695,474	37.1	869,722	31.8	14,500	1.7	303,514	17.8	318,014	12.4
Only in schooling	442,287	51.2	363,875	19.4	806,162	29.4	64,7829	76.1	382,476	22.4	1,030,305	40.3
Both activities	135,518	15.7	424,879	22.7	560,397	20.5	83,211	9.8	825,547	48.3	908,758	35.5
Neither activity	111,268	12.9	390,949	20.8	502,217	18.3	105,634	12.4	196,206	11.5	301,840	11.8
Total in eco. activity^(a)	309,766	35.9	1,120,353	59.8	1,430,119	52.3	97,711	11.5	1,129,061	66.1	1,226,772	47.9
Total in schooling^(b)	577,805	66.9	788,754	42.1	1,366,559	49.9	731,040	85.9	1,208,023	70.7	1,939,063	75.8

Notes: (a) Refers to all children in economic activity, regardless of school status; (b) Refers to all children attending school, regardless of work status.

Source: UCW calculation based on Zambia Labour Force Survey, 2005

Table A3. Children aged 7-14 in economic activity, by industry, area of residence and sex, Mali and Zambia

Country	Industry	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Mali	Agriculture	80.4	60.1	72.8	88.5	81.0	85.8	86.8	76.2	83.0
	Manufacturing	2.8	6.5	4.2	1.2	5.7	2.8	1.6	5.9	3.1
	Services	7.8	9.5	8.5	2.2	2.0	2.1	3.4	3.7	3.5
	Domestic work	9.0	23.2	14.3	7.2	10.9	8.5	7.6	13.7	9.8
	Other	0.0	0.7	0.3	0.8	0.5	0.7	0.6	0.6	0.6
	Total	100	100	100	100	100	100	100	100	100
Zambia	Agriculture	76.5	65.9	71.8	97.9	97.5	97.7	96.2	95.3	95.7
	Manufacturing	0.7	0.0	0.4	0.7	0.5	0.6	0.7	0.5	0.6
	Services	22.8	34.1	27.8	1.3	1.9	1.6	3.1	4.2	3.6
	Other	--	--	--	0.1	--	0.1	0.1	--	0.1
	Total	100	100	100	100	100	100	100	100	100

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

Table A4. Children aged 7-14 in economic activity, by work modality, area of residence and sex, Mali and Zambia

Country	Work modality	Urban			Rural			Total		
		Male	Female	Total	Male	Female	Total	Male	Female	Total
Mali	Employee	3.4	2.3	3.0	1.5	0.9	1.3	1.9	1.2	1.7
	Domestic worker	0.6	7.8	3.3	0.2	0.2	0.2	0.3	1.9	0.9
	Unpaid family	92.6	85.2	89.9	97.7	97.2	97.5	96.6	94.6	95.9
	Self employed	3.4	4.6	3.9	0.7	1.6	1.0	1.2	2.3	1.6
	Total	100	100	100	100	100	100	100	100	100
Zambia	Self employed	4.2	4.6	4.4	1.8	3.2	2.5	2.0	3.3	2.6
	Paid employee	0.9	2.3	1.5	0.7	0.5	0.6	0.7	0.6	0.7
	Unpaid family	93.8	91.8	92.9	97.1	96.1	96.6	96.8	95.8	96.3
	Other	1.2	1.3	1.2	0.4	0.2	0.3	0.5	0.3	0.4
	Total	100	100	100	100	100	100	100	100	100

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

Table A5. Involvement in economic activity and hazardous work, 7-14 years group, by orphan status, Mali and Zambia

Country	Economic activity			Hazardous work		
	Orphans	Not Orphans	Total	Orphans	Not Orphans	Total
Mali	49.2	52.5	52.3	83.5	77.9	78.3
Zambia	44.6	48.8	47.9	77.5	84.2	81.2

Source: UCW calculations based on micro-data from *L'Enquête nationale sur le travail des enfants au Mali* (2005) and *Zambia Labour Force Survey* (2005).

Table A6. Involvement in economic activity and school drop-out and repetition ratios, children aged 7-14 years, results of OLS regression with robust standard errors, Zambia^(a)

Independent variable ^(b)	Education ward repetition ratio		Education ward dropout ratio	
	coeff.	z	coeff.	z
work in economic activity	0.0219	1.78	0.0184	1.42
Age	-0.0343	-0.43	0.1434	1.97
age ²	0.0012	0.31	-0.0069	-1.96
male sex	-0.0582	-1.78	0.0201	0.7
household size	0.0079	1.6	-0.0068	-1.37
siblings 0-4	-0.0025	-0.24	0.0204	1.52
siblings 5-14	-0.0149	-1.76	0.0148	1.86
sex of the household head	0.0257	1.1	-0.0018	-0.09
household head does not have any education	-0.0056	-0.17	0.0234	0.71
household head has basic education	0.0142	0.47	-0.0029	-0.11
household head has secondary education	-0.0159	-0.84	0.0123	0.41
household income per capita (quintile 1)	0.0077	0.24	0.0311	1.22
household income per capita (quintile 2)	0.0037	0.11	0.0059	0.25
household income per capita (quintile 3)	0.0106	0.35	0.0272	0.97
household income per capita (quintile 4)	0.0145	0.52	0.0338	1.35
Urban	-0.0273	-2.22	0.0114	1.16

Notes: (a) All variables are taken to be equal to the mean of the education ward; (b) Variables for regions not shown.

Source: UCW calculations based on *Zambia Labour Force Survey, 2005*

Table A7. Working hours and school drop-out and repetition ratios, children aged 7-14 years, results of OLS regression with robust standard errors, Zambia^(a)

Independent variable ^(b)	Education ward repetition ratio		Education ward dropout ratio	
	coeff.	z	coeff.	z
weekly working hours in economic activity	0.00002	0.06	0.00053	1.81
age	0.02126	0.5	0.05294	1.58
age ²	-0.00110	-0.55	-0.00254	-1.58
male sex	-0.01495	-1.05	0.01750	1.31
household size	0.00114	0.28	-0.00345	-0.88
siblings 0-4	0.00762	0.94	0.01368	1.55
siblings 5-14	-0.00417	-0.7	0.01111	1.91
sex of the household head	0.00021	0.01	-0.00409	-0.34
household head does not have any education	-0.00164	-0.06	0.03396	1.4
household head has basic education	0.00511	0.21	0.02881	1.46
household head has secondary education	0.01062	0.49	0.02783	1.43
household income per capita (quintile 1)	0.00153	0.07	0.01761	1.33
household income per capita (quintile 2)	0.01549	0.65	0.00655	0.46
household income per capita (quintile 3)	-0.00411	-0.19	0.01224	0.87
household income per capita (quintile 4)	0.00059	0.03	0.02693	2.04
urban	-0.03805	-3.77	-0.00012	-0.01

Notes: (a) All variables are taken to be equal to the mean of the education ward; (b) Variables for regions not shown.

Source: UCW calculations based on *Zambia Labour Force Survey, 2005*

Table A8. Determinants of children's work and schooling, marginal effect after bivariate probit estimation, age group 7-14, Zambia^(a)

Explanatory variables		Work only		Study only		Inactive		Work and study	
		dy/dx	z	dy/dx	z	dy/dx	z	dy/dx	z
Child age and sex	Age	-0.1077	-9.32	0.1078	3.52	-0.2562	-15.64	0.2561	9.07
	Age squared	0.0049	8.99	-0.0059	-4.07	0.0106	13.6	-0.0096	-7.13
	Male	0.0041	0.86	-0.0209	-1.59	-0.0092	-1.33	0.0259	2.15
Household characteristics	Household size	-0.0002	-0.1	-0.0022	-0.5	-0.0030	-1.34	0.0053	1.35
	Siblings 0-4	-0.0050	-1.67	0.0096	1.17	-0.0068	-1.57	0.0023	0.31
	Siblings 5-14	0.0000	-0.01	-0.0014	-0.19	-0.0017	-0.43	0.0031	0.46
	Sex of the household head	0.0082	1.4	-0.0171	-1.02	0.0099	1.15	-0.0010	-0.06
Education of household head ⁽¹⁾	Household head has no education	0.1422	4.77	-0.2286	-5.96	0.1026	3.27	-0.0162	-0.44
	Household head has basic education	0.0674	5.15	-0.1810	-4.84	0.0462	2.26	0.0674	1.99
	Household head has secondary education	0.0401	2.18	-0.1162	-3.00	-0.0046	-0.21	0.0807	2.19
Household income ⁽²⁾	Household income per capita (quintile 1)	0.1334	6.99	-0.2366	-8.35	0.0800	4.01	0.0232	0.84
	Household income per capita (quintile 2)	0.0867	5.48	-0.1629	-5.73	0.0702	3.76	0.0060	0.23
	Household income per capita (quintile 3)	0.0914	6.1	-0.1777	-6.66	0.0600	3.52	0.0262	1.04
	Household income per capita (quintile 4)	0.0244	2.17	-0.0335	-1.25	0.0533	3.25	-0.0442	-1.85
School quality	Pupil-teacher ratio	0.0001	0.71	-0.0005	-1.51	-0.0003	-1.5	0.0007	2.21
Exposure to shocks	Shock 1: death of the household member	0.0176	1.76	-0.0474	-2	0.0037	0.29	0.0262	1.18
	Shock 2: illness/injuries	0.0294	2.46	-0.0611	-2.33	0.0243	1.59	0.0074	0.3
	Shock 3: crop failure	0.0327	3.39	-0.1002	-4.8	-0.0097	-0.91	0.0773	3.81
	Shock 4: flood or drought	-0.0098	-1.08	0.0129	0.49	-0.0189	-1.44	0.0158	0.65
	Shock 5: loss/destruction of property	0.0780	2.44	-0.1365	-2.7	0.0628	1.73	-0.0043	-0.09
	Shock 6: other shock	0.0306	1.38	-0.1410	-2.97	-0.0411	-2.18	0.1515	3.11
Place of residence ⁽³⁾	Urban	-0.0779	-11.98	0.2849	15.87	0.0359	3.21	-0.2429	-15.77
	Central	-0.0358	-4.81	0.1221	4.84	-0.0078	-0.53	-0.0784	-3.63
	Copperbelt	-0.0992	-20.17	0.4088	18.95	0.0633	3.23	-0.3729	-36.67
	Eastern	0.0526	3.76	-0.1085	-4.00	0.0345	2.06	0.0214	0.85
	Luapula	-0.0450	-6.98	0.1714	6.53	0.0852	3.91	-0.2116	-13.43
	Lusaka	-0.0553	-8.83	0.1643	5.84	0.2010	7.81	-0.3100	-24.24
	Northern	0.0281	2.23	-0.1064	-3.86	-0.0238	-1.78	0.1021	3.77
	Southern	-0.0003	-0.03	0.0048	0.18	0.0044	0.3	-0.0089	-0.38

Notes: (a) Statistically significant results presented in bold.

Reference categories: (1) Household head has higher education

(2) Household income per capita (quintile 5)

(3) Northwestern region

Source: UCW calculations based on Zambia Labour Force Survey, 2005

Table A9. Determinants of children's work and schooling, marginal effect after bivariate probit estimation, age group 7-14, Mali

	Work only		Study only		Work and study		Inactive	
	dy/dx	t-stat	dy/dx	t-stat	dy/dx	t-stat	dy/dx	t-stat
Age	-0,050	-2,10	0,039	1,40	0,147	6,17	-0,137	-6,56
Age ²	0,003	3,00	-0,003	-2,42	-0,005	-4,86	0,005	5,41
Female	-0,084	-8,13	-0,124	10,19	-0,229	-22,08	0,189	20,29
Household characteristics								
Household size	-0,002	-0,93	0,005	1,44	-0,015	-4,84	0,012	4,68
Siblings 0-4	-0,000	-0,08	-0,000	-0,04	0,005	1,06	-0,005	-1,08
Siblings 5-14	0,015	3,34	-0,020	-3,69	0,018	3,81	-0,013	-3,24
Siblings 15-17	-0,017	-2,14	0,017	1,82	0,021	2,58	-0,021	-2,96
Log of household total expenditure	-0,033	-6,66	0,035	6,04	0,025	5,00	-0,027	-6,16
Water access	-0,140	-8,88	0,202	7,17	-0,043	-2,01	-0,018	-0,97
Rural	0,073	5,96	-0,089	-5,83	0,019	1,54	-0,003	-0,28
Vulnerability								
Fostered	0,071	2,67	-0,075	-2,91	-0,000	-0,03	0,004	0,20
Maternal orphan	-0,013	-,45	0,014	0,39	-0,062	-2,37	0,061	1,97
Paternal orphan	0,075	2,25	-0,083	-2,74	-0,074	-3,12	0,083	2,66
Double orphan	0,037	0,83	-0,042	-0,89	-0,051	-1,40	0,056	1,30
Household head characteristics								
Female	-0,052	-2,24	0,065	2,00	0,000	0,01	-0,013	-0,59
No education	0,135	7,58	-0,162	-5,89	-0,049	-2,07	0,076	4,60
Primary education	0,094	3,22	-0,096	-3,52	-0,026	-1,05	0,028	1,14
Wage employment	-0,135	-9,94	0,189	8,50	-0,063	-3,91	0,008	0,55
Self employment (non-agricultural)	-0,101	-7,39	0,127	6,39	-0,111	-8,34	0,085	5,21
Regional dummies								
Kayes	0,366	10,27	-0,296	-15,14	0,001	0,05	-0,071	-3,33
Koulikoro	0,153	4,70	-0,151	-5,38	-0,010	-0,39	0,008	0,34
Sikasso	0,386	11,25	-0,347	-19,16	0,094	2,98	-0,133	-8,49
Ségou	0,316	9,46	-0,306	-13,17	0,084	2,76	-0,095	-4,76
Mopti	0,313	8,47	-0,269	-12,04	-0,114	-4,99	0,070	2,23
Tombouctou	0,352	7,60	-0,267	-12,58	-0,114	-4,41	0,029	0,79
Gao	0,008	0,23	-0,010	-0,23	-0,048	-1,41	0,049	1,30
Kidal	-0,183	-5,68	0,179	3,02	-0,197	-8,37	0,201	3,37

Notes : The reference category for the household head employment status is family work;

The reference category for the household level of education is higher education;

The reference category for the regional dummies is Bamako.

Source: UCW calculations based on *Enquête nationale sur le travail des enfants au Mali*, 2005.

ANNEX 2: CONSTRUCTION OF VARIABLES FOR CHILDREN'S WORK AND SCHOOLING

Zambia

The following are the survey questions used to construct the *child economic activity variable*.

Section III							
ECONOMIC ACTIVITY IDENTIFICATION: This section covers activities in the last seven days for all household members aged 5 years and above							
Now I am going to ask some questions about activities in the last seven days for each household member aged 5 years and above							
	What was (name's) main activity in the last 7 days? 1. Working/Assisting in work of any kind>> Sec IV 2. Not working but available for work 3. Not working and not available for work 4. Housewife/homemaker 5. Fulltime Student 6. Sick 7. Retired/Aged 9. Other..... (Specify)	Did (Name) help in unpaid household business of any kind in the last 7 days? 1.Yes>Section IV 2.No	Did (Name) do any work as a subsistence farmer e.g. growing crops, raising cattle, weeding, harvesting etc in the last 7 days? 1.Yes>Section IV 2.No	Did (Name) do any work as a learner or apprentice for a wage or salary in cash or kind in the last 7 days? 1.Yes>Section IV 2.No	Did (Name) catch any fish or gather any other food for sale or household consumption in the last 7 days? 1.Yes>Section IV 2.No	Did (Name) do any work for a wage, salary, commission or any payment in kind (excl. domestic work) in the last 7 days? 1.Yes>Section IV 2.No	Did (Name) do any work as a domestic worker for a wage, salary, or any payment in kind in the last 7 days? 1.Yes 2. No>Section IV Q25
1. PN	2. Q1	3. Q2	4. Q3	5. Q4	6. Q5	7. Q6	8. Q7

Children were classified as being *involved in non-economic activity* if she/he "has been engaged in housekeeping activities or household chores in own parents'/Guardian's home on a regular basis during the last 7 days.

The variable *school attendance* was constructed as a child declaring to have ever and subsequently of being currently attending school.

Section II		
EDUCATION AND SCHOOL ATTENDANCE OF ALL PERSONS AGED 5 AND ABOVE		
Person number	Has (Name) ever attended school? 8. Yes 9. No>Q6	9. Is (Name) currently attending school? 1. Yes 2. No>>Q6
10. PN	Q2	11. Q4

Mali

The following are the survey questions used to construct the *child economic activity variable*.

12. Section III		13. Statut actuel des activités de tous les membres du ménage (5 ans et +) durant la semaine de référence	
Maintenant je vais vous demander à propos des activités des travaux de tous les membres du ménage. Par travail il faut entendre une activité exécutée pour un paiement (en espèce ou en nature), profit, gains familiaux ou pour un usage ou consommation personnels, y compris les travaux familiaux non payés contributions.			
Depuis le (jour de la semaine) dernier (Nom) a-t-il/elle travaillé?	Depuis le (jour de la semaine) dernier (Nom) a-t-il entrepris un quelconque travail pour :	Depuis le (jour de la semaine) dernier (Nom) a t-il/elle entrepris une des activités suivantes pour de l'argent ou pour sa propre consommation ou pour quelqu'un d'autre ?	Même si (Nom) n'a pas travaillé depuis le (jour de la semaine) dernier (Nom) travaille-t-il /elle dans une affaire ou une entreprise d'où il est temporairement absent (e)?
1. Oui >> C30 2. Non	1. Un paiement en espèce? > C30 2. Paiement en nature > C30 3. son compte personnel? > C30 4. sa propre entreprise? > C30 5. un membre de la famille sans paiement? > C30 6. Non <i>Encercler la/les réponse(s) affirmative(s)</i>	1. Cultiver ou récolter les produits agricoles ou attraper ou ramasser les poissons ou fruits de mer ou des activités connexes ? >> C31 2. Préparer la nourriture, vêtements ou travaux d'artisanat pour vendre? >> C31 3. Vente d' articles, journaux, boisson, nourriture ou produits agricoles ? >> C31 4. Laver, repasser, nettoyer, réparer des outils ou équipement pour quelqu'un d'autre contre paiement en espèce ou en nature ? >> C31 5. Transport de marchandises au marché ou pour stocker ou autres activités relatives au transport des marchandises pour vente ? >> C31 6. Construction, maintenance des bâtiments, maisons ou voiture pour quelqu'un d'autre ? >> C31 7. Non <i>Encercler la/ les réponse(s) affirmative(s)</i>	1. Oui 2. Non >> C39

The variable *child involvement in non-economic activity* was constructed on the basis of the following separate module included in ENTE 2005.

14. Section III		15. Statut de l'activité courante de tous les membres du ménage (5 ans et +) durant la semaine de référence (suite)...			
ACTIVITIES MENAGERES					
<p>Depuis le (jour de la semaine) dernier (Nom) a-t-il/elle mené des corvées domestiques comme préparer, nettoyer, faire la lessive, la vaisselle, chercher l'eau ou porter l'eau pour les enfants, ?</p> <p>1. Oui 2. Non >>C45 3. Ne sait pas >C45</p>	<p>Combien d'heures par semaine (Nom) utilise-t-il/elle d'habitude pour ces corvées ménagères?</p>	<p>Depuis le (jour de la semaine) dernier, combien de jours (Nom) a-t-il/elle travaillé dans ces corvées ménagères?</p>	<p>Combien d'heures (Nom) met -il/elle maintenant dans ces corvées ménagères?</p> <p><i>Inscrire les heures par semaine de référence</i></p>	<p>Quand (Nom) exécute-t-il/elle généralement ces activités?</p> <p>1. le jour après l'autre travail 2. jour et nuit à plein temps 3. Après l'école 4. Avant l'école 5. Avant et après l'école</p>	<p>Quelles corvées ménagères (Nom) exécutait-il/elle principalement ? <i>(plusieurs réponses)</i></p> <p>1. Préparer/servir les repas 2. Faire le marché du ménage 3. Faire la Vaisselle/nettoyer de la maison 4. Faire la lessive 5. Faire les petites réparations de la maison 6. Transporter l'eau/bois 7. Garder les enfants 8. Garder les vieux, les malades 9. Autres activités similaires</p>

Child school attendance was constructed on the basis of the following survey questions.

16. Section II	Education et Formation pour toutes les personnes âgées de 5 ans et plus <i>Cette section est destinée à indiquer le niveau d'alphabétisation et d'éducation de toutes les personnes résidant habituellement dans ce ménage âgées de 5 ans et plus. Nous avons aussi besoin de plus de détails sur les fréquentations scolaires des enfants ayant un âge compris entre 5 et 17 ans révolus.</i>		
17. <i>Reporter les numéros des personnes et leur âge de la Section I colonne A6</i>	<i>Pour toutes les personnes âgées de 5 ans et plus poser les questions Q.C15 et C16</i>		<i>Seulement pour les personnes de 5 à 17 ans, continuer avec les questions suivantes, par conséquent excluant les adultes.</i>
	(Nom) a-t-il/elle jamais fréquenté l'école? 10. Oui 11. Non>>C23	Quel est le plus haut niveau scolaire que (nom) a atteint ? quelle est la plus grande classe que (Nom) a atteinte à ce niveau scolaire? Niveau : 1. Préscolaire 2. Primaire 3. Secondaire 4. Supérieur 5. Programme non standard 9. Ne sait pas Diplôme: 99 pour ne sait pas 00 pour Préscolaire	18. (Nom) fréquente-t-il/elle actuellement l'école? 3. Oui 4. Non>C21