



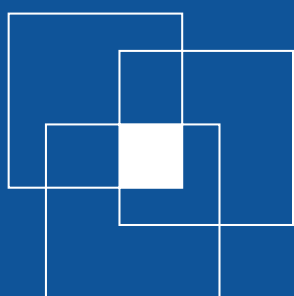
International
Labour
Organization



Republic
of Yemen

Working children in the Republic of Yemen: The results of the 2010 National Child Labour Survey

November 2012



International
Programme on
the Elimination
of Child Labour
(IPEC)

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Executive Summary

In 2010, the Central Statistical Organization (CSO) of the Republic of Yemen, in collaboration with ILO-IPEC, the Social Development Fund and UNICEF, conducted the first National Child Labour Survey (NCLS) in Yemen. The NCLS was designed to provide indicators on three main aspects of children's lives: economic activity, schooling and unpaid household services. The survey covered 9,571 households containing 67,617 individuals, 23,535 of whom were children between 5 and 17 years of age.

Children aged 5-17 constitute 34.3 percent of the Yemeni population. Of the 7.7 million children in this age group, 1.6 million, or 21 percent, are employed (Table E.1). The employment rate is higher among older children than younger children. While 11 percent of 5-to-11-year-olds are employed, this figure increases to 28.5 percent among 12-to-14-year-olds and further to 39.1 percent among 15-to-17-year-olds. The employment rate of boys (21.7%) is only slightly higher than that of girls (20.1%) (Table E.2). In fact, the employment rate of girls (12.3%) surpasses that of boys (9.8%) among younger children aged 5-11. Among older children aged 15-17, the employment rate of boys (44.8%) is higher than that of girls (32.3%).

Table E.1. Prevalence of employment by age – short reference period

	Age 5-17	Age 5-11	Age 12-14	Age 15-17
Child population	7,703,000	4,262,000	1,890,000	1,551,000
Employed (n)	1,614,000	469,000	539,000	606,000
Labour force	1,634,000	469,000	539,000	626,000
Child labour	1,309,000	469,000	466,000	374,000
Employment rate (%)	21.0%	11.0%	28.5%	39.1%
LFPR (%)	21.2%	11.0%	28.5%	40.4%
Child labour rate	17.0%	11.0%	24.7%	24.1%

Notes: The labour force includes both the employed and unemployed; however, unemployment is relevant only for children aged 15-17. LFPR refers to the Labour Force Participation Rate. The reference period for employment is the week preceding the survey.

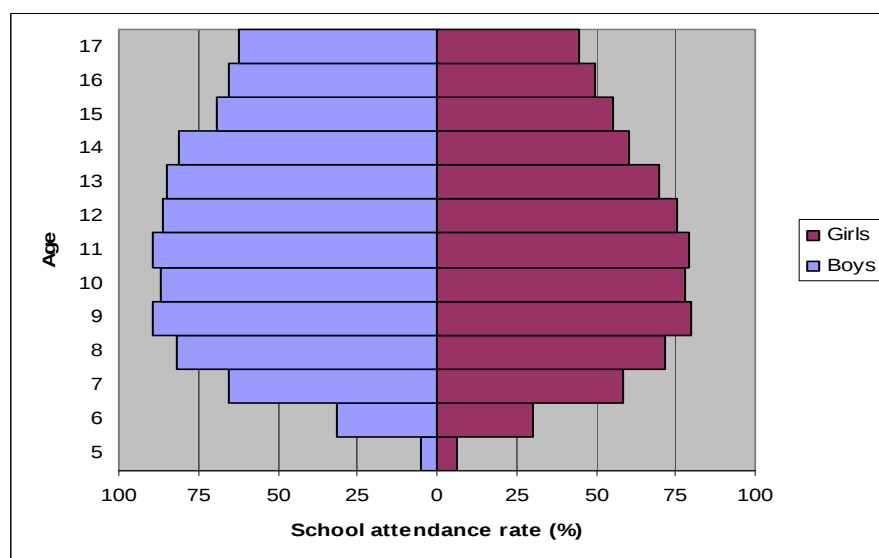
When children who are looking for work are also taken into account (relevant only for children aged 15-17), the overall rate of economic activity among 5-to-17-year-olds increases only slightly, from 21.0 percent to 21.2 percent (Tables E.1. and E.2); however, a significant increase (from 44.8% to 47%) occurs in the economic activity rate of older boys aged 15-17.

Table E.2. Distribution of boys and girls by age group and labour status

	Age 5-17		Age 5-11		Age 12-14		Age 15-17	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Child population	4,062,000	3,641,000	2,224,000	2,038,000	992,000	898,000	846,000	705,000
Employed	882,000	732,000	219,000	250,000	285,000	254,000	379,000	227,000
Labour force*	900,000	733,000	219,000	250,000	285,000	254,000	397,000	229,000
Child labour	668,000	640,000	219,000	250,000	235,000	231,000	215,000	159,000
Employment rate (%)	21.7%	20.1%	9.8%	12.3%	28.7%	28.3%	44.8%	32.3%
LFPR (%)	22.2%	20.1%	9.8%	12.3%	28.7%	28.3%	47.0%	32.5%
Child labour rate (%)	16.5%	17.6%	9.8%	12.3%	23.6%	25.8%	25.4%	22.6%

Notes: The labour force includes both the employed and unemployed; however, unemployment is relevant only for children aged 15-17. LFPR refers to the Labour Force Participation Rate. The reference period for employment is the week preceding the survey.

Child labourers include children performing hazardous work as well as other children, who, due to their age or working hours, are considered to be facing various risks to their physical, social, psychological, or educational development as a result of employment. An estimated 1,309,000 children in Yemen are considered child labourers. This represents 17.0 percent of all children aged 5-17 and 81.1 percent of all working children. Child labour rates are higher among older children: the rate is 11.0 percent for 5-11-year-olds, compared to 24.7 percent and 24.1 percent, respectively, for 12-14-year-olds and 15-17-year-olds (Table E.1). The proportion of boys who are child labourers is only slightly lower than that of girls (16.5% vs. 17.6%, Table E.2).

Figure E.1. School attendance pyramid

The school attendance rate among 5-to-17-year-olds is 66.3 percent. One reason for this low rate is that only a very small proportion of 5-year-olds attend pre-school education, which is not compulsory (Figure E.1). When only children of compulsory school

age are taken into account (6-14-year-olds), the attendance rate increases to 73.6 percent. However, the attendance rate reaches a low of 59.8 percent among 15-to-17-year-olds. While a high drop-out rate may explain the reduction in school attendance among older children, the generally low level of school attendance among compulsory school-aged children points to two other problems: 1) children's school entry is delayed, and 2) a significant proportion of children never enter school. Only 30.7 percent of children attend school at age 6 (the age at which children are expected to start compulsory school); this rate increases to 64.8 among 7-year-olds, 78.8 percent among 8-year-olds and 86.2 percent among 9-year-olds. Among 17-year-olds, 12.7 percent have never attended school.

Table E.3. School attendance by age, residence and sex

School attendance	Age 6-17		Age 6-14		Age 15-17	
	Boys	Girls	Boys	Girls	Boys	Girls
All children	77.2	63.4	79.6	67.1	68.6	49.3
Urban	82.9	80.6	84.4	83.5	78.1	70.4
Rural	75.2	57.5	78.0	61.6	65.1	41.5

Low school attendance is a problem particularly for female and rural children (Table E.3). Girls aged 6-17 years have an attendance rate of 63.4 percent, compared to a 77.2 percent attendance rate among boys in the same age group. An even larger gap – 15 percentage points – exists between urban and rural children, among whom attendance rates are 81.8 percent and 66.9 percent, respectively. Hence, rural girls have the lowest attendance rate (57.5%), and urban boys have the highest (82.9%).

Table E.4. Prevalence of unpaid household services (UHS) by age and sex

	Age 5-17		Age 5-11		Age 12-14		Age 15-17	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Child population	4,062,116	3,640,867	2,224,354	2,037,799	992,042	898,165	845,720	704,902
UHS (n)	1,711,903	2,201,971	635,797	841,026	548,549	733,810	527,557	627,135
UHS (%)	42.2%	60.5%	28.6%	41.3%	55.3%	81.7%	62.4%	89.1%

Note: Reference period is the week preceding the survey.

More than half of children perform unpaid household services (UHS, i.e. household chores). This rate is higher among older children and girls (Table E.4). For instance, while 34.7 percent of 5-11-year-olds are engaged in UHS, this figure increases to 74.5 percent among 15-17-year-olds. Likewise, 42.2 percent of boys perform UHS as compared to 60.5 percent of girls. The average time devoted to UHS, however, is moderate, at 10.5 hours per week (7.5 hours/week for boys and 12.8 hours/week for girls).

A significant proportion of children (almost half) are involved in multiple activities (Table E.5). The most common time-use patterns involve either a combination of school attendance and unpaid household services (29.6%) or school attendance alone (29.0%). The pattern of time-use differs between boys and girls, with a larger proportion of girls engaging in UHS or UHS in combination with another activity, and a larger proportion of boys attending school, often in combination with another activity (Table E.5.)

Table E.5. Children (aged 6-17) engaged in multiple activities by sex

	All	Boys	Girls
School + Employment + Unpaid household services	615,000 8.5%	331,000 8.7%	284,000 8.4%
School + Employment	251,000 3.5%	214,000 5.7%	36,000 1.1%
School + Unpaid household services	2,130,000 29.6%	1,049,000 27.7%	1,081,000 31.8%
Employment + Unpaid household services	523,000 7.3%	163,000 4.3%	361,000 10.6%
School only	2,085,000 29.0%	1,331,000 35.1%	753,000 22.2%
Employment only	217,000 3.0%	171,000 4.5%	46,000 1.4%
Unpaid household services only	594,000 8.3%	143,000 3.8%	451,000 13.3%
Inactive (Idle)	773,000 10.7%	390,000 10.3%	383,000 11.3%
All children aged 6-17	7,191,000	3,793,000	3,398,000

The two leading sectors in terms of child employment are agriculture (56.1%) and private household employment (29.0%) (Table E.6), followed by wholesale and retail trade (7.9%). Only a small percent of children (1.9%) are employed in manufacturing. The economic activities of boys and girls are similar, although a larger proportion of boys are employed in agriculture, wholesale and retail trade and manufacturing, whereas a larger proportion of girls are employed in private households. A non-negligible proportion of boys (2.8%) are also employed in construction, an economic activity that is deemed hazardous for children.

Table E.6. Distribution of employed children by type of economic activity and sex

Economic activity (ISIC rev3.1)	All	Boys	Girls
Agriculture, hunting, forestry and fishing	905,000 56.1%	577,000 65.4%	328,000 44.8%
Manufacturing	31,000 1.9%	24,000 2.7%	7,000 1.0%
Construction	26,000 1.6%	25,000 2.8%	<1000 0.1%
Wholesale and retail trade	128,000 7.9%	117,000 13.2%	11,000 1.5%
Private households	468,000 29.0%	88,000 10.0%	380,000 52.0%
Other activities	56,000 3.5%	51,000 5.8%	5,000 0.7%
Employed children	1,614,000 100%	882,000 100%	732,000 100%

The majority (57.4%) of working children are agricultural workers (Table E.7). Elementary workers in non-agricultural employment represents another important occupational category, accounting for 30 percent of all working children. The overwhelming majority (93%) of this group is classified as “messengers, porters, doorkeepers and related workers”; however, a more detailed analysis reveals children in this group to be employed mainly in fetching water and firewood for their households and for others. Service and sales workers also constitute 7.2 percent of all working children, and another small proportion (2.8%) are craft workers.

The occupational distributions of boys and girls differ in that a larger proportion of boys work as agricultural workers, while a larger proportion of girls work as elementary workers outside of agriculture (Table E.7). Girls working as elementary workers are mainly engaged in carrying water and firewood.

Table E.7. Distribution of employed children by occupation and sex

Occupation (ISCO-88)	All	Boys	Girls
Service and sales workers	116,000 7.2%	108,000 12.2%	8,000 1.1%
<i>Shop sales persons and demonstrators – 522</i>	96,000 6.0%	89,000 10.1%	7,000 1.0%
Agricultural workers	811,000 50.3%	479,000 54.3%	332,000 45.4%
<i>Market gardeners and crop growers- 611</i>	250,000 15.5%	200,000 22.6%	50,000 6.8%
<i>Market-oriented animal producers and related w-612</i>	527,000 32.7%	268,000 30.4%	259,000 35.4%
Craft and related trades workers	46,000 2.8%	40,000 4.5%	6,000 0.8%
Elementary occupations	598,000 37.1%	219,000 24.8%	379,000 51.8%
<i>Messengers, porters, doorkeepers, and related w. – 915</i>	452,000 28.0%	93,000 10.5%	359,000 49.1%
<i>Agricultural, fishery and related labourers – 921</i>	114,000 7.1%	102,000 11.6%	12,000 1.7%
Others	43,000 2.7%	36,000 4.2%	6,000 0.8%
Employed children	1,614,000 100%	882,000 100%	732,000 100%

The majority of working children (58.2%) are classified as “unpaid family workers”, and another quarter are classified as “unpaid workers” (Table E.8), a group that consists mainly of children who fetch water and firewood for households other than their own (44.7%) and children who tend the livestock of other households (36.3%). Overall, a larger proportion of girls than boys work without pay, with 63.4 percent of employed girls classified as unpaid family workers and 33.4 percent as unpaid workers, compared to 53.8 percent and 19.1 percent, respectively, of boys. In contrast, 19.8 percent of boys and only 1.4 percent of girls are wage workers (primarily outside of agriculture), and 7.3 percent of boys work on their own account, compared to only 1.7 percent of girls.

Table E.8. Distribution of employed boys and girls by status in employment

Status in employment	All	Boys	Girls
Wage worker in agriculture	62,000 3.9%	58,000 6.6%	5,000 0.6%
Wage worker outside agriculture	123,000 7.6%	116,000 13.2%	6,000 0.8%
Own-account worker	77,000 4.8%	64,000 7.3%	12,000 1.7%
Unpaid family worker	939,000 58.2%	475,000 53.8%	464,000 63.4%
Unpaid worker	413,000 25.6%	169,000 19.1%	245,000 33.4%
All employed children	1,614,000 100%	882,000 100%	732,000 100%

Children spend an average of 23 hours at work. On average, boys are estimated to work for longer hours than girls: 25.3 hours per week for boys, compared to 20.3 for girls. A non-negligible proportion of children work for more than 30 hours per week, the national cut-off-point for hours deemed hazardous for children. This is especially true for boys, 27 percent of whom work for more than 30 hours per week, compared to about 16 percent of girls.

The average monthly cash income of children who are gainfully employed is estimated at 16,954 Yemeni Rials, which corresponds to between 45 to 58 percent of adult earnings, depending on the chosen comparison group. Among wage earners, 42.5 percent of children also receive non-wage benefits, usually in the form of meals, free or subsidized accommodations, rest days and clothing.

Table E.9. Distribution of child labourers by types of risks faced (%)

Child Labourers (a+b+c)	All		Boys		Girls	
	1,309,000		668,000		640,000	
a) Children in hazardous work	663,000 50.7%	100%	264,000 39.5%	100%	399,000 62.3%	100%
<i>In hazardous economic activity</i>	29,000 2.2%	4.4%	28,000 4.3%	10.8%	1,000 0.1%	0.2%
<i>In hazardous occupation</i>	634,000 48.4%	95.6%	236,000 35.3%	89.2%	398,000 62.2%	99.8%
b) Working children aged 5-13 years	480,000 36.6%	100%	279,000 41.8%	100%	200,000 31.3%	100%
c) Children aged 14-17 working more than 30 hrs/week	166,000 12.7%	100%	125,000 18.7%	100%	41,000 6.4%	100%

As noted earlier a significant proportion of working children are child labourers. According to the sequential classification of risks given in Table E.9, 50.7 percent of child labourers are engaged in hazardous work; children too young to work for even one hour per week constitute 36.6 percent of child labourers¹; and children who work excessive hours for their age constitute the remaining 12.7 percent of child labourers. When children in

¹ There is no provision for light work in Yemen.

hazardous work are examined in detail, the overwhelming majority (95.6%) are found to be employed in hazardous occupations, with the remainder in hazardous economic activities (i.e. mining and construction).

Boys constitute 51.1 percent of child labourers, but 54.7 percent of working children. The more balanced gender distribution of child labour stems from girls' greater exposure to risks at work. Indeed, while 75.7 percent of working boys are child labourers, the corresponding figure among girls is 87.5 percent. The risks faced by boys and girls differ considerably. While 39.5 percent of boy child labourers are in hazardous work, the corresponding rate among girl child labourers is 62.2 percent. This classification of a larger proportion of working girls as child labourers is a result of the types of occupation they hold (See Appendix C for the list of hazardous occupations identified by the Ministry of Social Affairs and Labor of Yemen), rather than their sectors of economic activity, e.g. construction and mining, since very few girls are found in such activities. Due to the classification of a larger proportion of girls as involved in "hazardous work", smaller proportions of girls than boys are classified as child labourers due to employment at too young an age (i.e. below age 14) and excessive work hours (i.e. in excess of 30 hours per week).

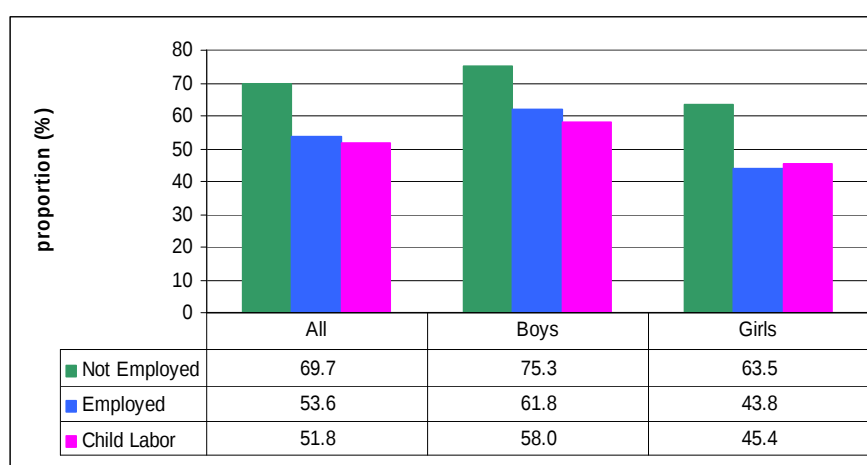
Multivariate analyses of child employment, child labour and school attendance indicate that a combination of factors increases the risk of child employment and child labour and decreases the likelihood of children's school attendance. Among individual-level factors, age is a strong determinant of child employment and child labour as well as schooling, with older children at a higher risk of employment and child labour and less likely to attend school. Although girls are not at a significantly higher risk of employment than boys, they are significantly less likely to attend school. Among household-level factors, the level of education of the household head and to some extent that of his/her spouse has an effect on employment and school attendance, with more education on the part of the household head and spouse reducing the likelihood of child employment and child labour and increasing the likelihood of school attendance. Whereas larger household size reduces the risk of employment and child labour, the number of children in the household aged four and under increases the risk of employment and child labour. Low household income is another risk factor that is associated with a higher likelihood of employment and child labour and lower school attendance. Community-level variables also play a role in determining the employment status of children, but not necessarily their school attendance. In particular, the lack of piped water and the use of wood, dung, or similar material as an energy source significantly increase the risk of child employment. Rural residence also increases the likelihood of employment and child labour; however, as with the community-level variables, rural residence is not necessarily negatively associated with school attendance.

The factors shaping time-use patterns differ for girls and boys. Whereas the education of the household head and spouse and the absence of the child's mother are stronger determinants of employment and child labour among boys than among girls, household income and community-level variables are more closely associated with employment and child labour among girls than among boys. In terms of school attendance, the education of the household head and his/her spouse and the absence of the household head's spouse are stronger determinants of school attendance among girls than among boys, whereas the absence of the child's father, the presence of other male children in the

household and household income are more strongly correlated with the schooling of boys than of girls.

One of the objections raised against child employment – and, more particularly, against child labour – stems from its possible adverse effects on children’s schooling. Although the CLS cannot be used to establish causality between child employment and child schooling, a strong negative association is observed between the two outcomes. As Figure E.2. shows, a sharp drop in the school attendance rate occurs when a child is employed. The drop is particularly sharp for girls, with a 63.5 percent school attendance rate among non-working girls, compared to 43.8 percent among working girls and 45.4 percent among girl child labourers.

Figure E.2. School attendance rates of children by employment status and sex



As compared to non-working children, the risk of never attending school is higher among working children as well as child labourers. While only 9.3 percent of non-working children aged 10-17 have never attended school, this figure jumps to 21.1 percent among working children and 23.2 percent among child labourers (Figure E.3). The increase is more substantial among girls than boys: while 14.4 percent of non-working girls have never attended school, this rate increases to 36.1 percent among working girls and 36.5 percent among girl child labourers.

Figure E.3. Proportion of children (aged 10-17) never attending school by employment status and sex

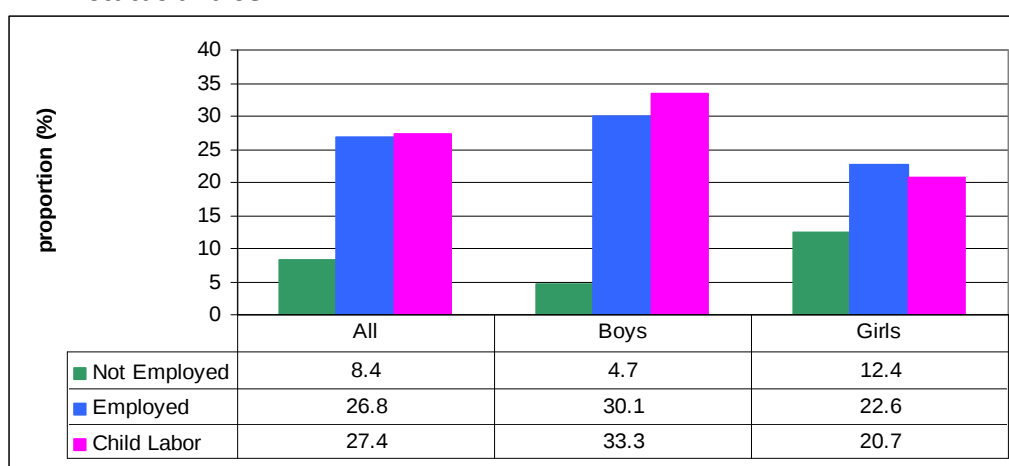
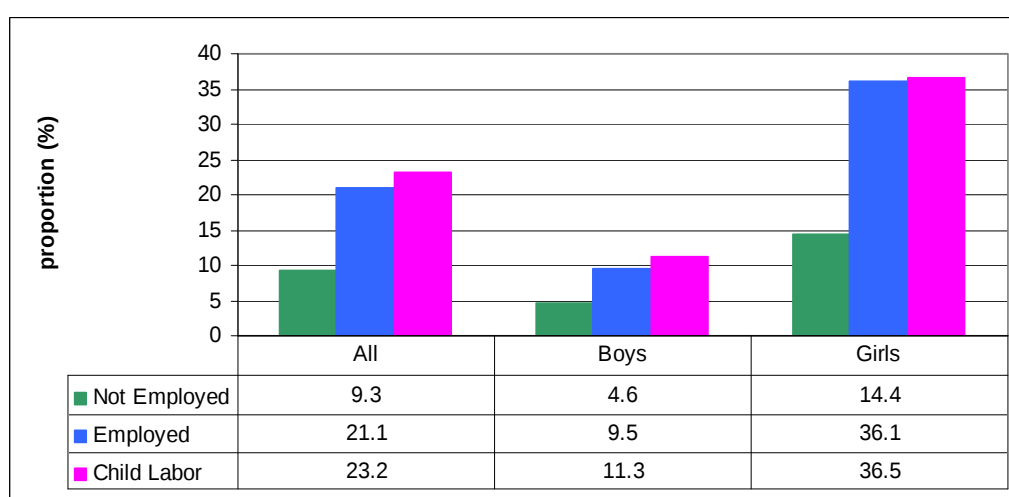


Figure E.4. Proportion of children (aged 10-17) previously attending school by employment status and sex



The risk of dropping out of school is also higher among working children and child labourers than among non-working children. While 8.4 percent of non-working children have dropped out of school (after attending at some time in the past), this proportion increases to 26.8 percent among working children and 27.4 percent among child labourers (Figure E.4). Working boys in general and boy child labourers in particular exhibit higher drop-out rates in comparison to working girls and girl child labourers. The jump in the drop-out rate among boys is from 4.7 percent for non-working children to 33.3 percent among child labourers as compared to 12.4 percent to 20.7 percent for girls.

The association between child employment and current and past school attendance indicates that a larger proportion of working boys and boy child labourers start school only to drop-out at a later date, whereas a larger proportion of working girls and girl child labourers never attend school in the first place. Thus, regardless of sex, among both working children and child labourers, a negative association is observed between employment and

schooling. Information on highest school qualifications obtained indicates that working children and child labourers lag considerably behind non-working children. Among 17-year-olds, while 48.6 percent of non-working children have no school qualifications (not even a primary school diploma), this figure is 65.8 percent among working children and 75.6 percent among child labourers.

Interventions aimed at combating child labour need to be multifaceted. They need to simultaneously address the issues of low overall school attendance of children, particularly working children; the employment of very young children; and the involvement of older children in hazardous work. Although they may not necessarily lead to the withdrawal of children from work, awareness-raising activities geared towards parents may help reduce children's workplace risks to some extent. Other interventions need to be devised to make school attractive in order to reduce drop-out rates, redirect children from work to school and retain them in education. Examples of such interventions used in many other developing countries include 'conditional-cash-transfer' and 'food-for-school' programs. Although reducing child labour is not the direct aim of such programs, by keeping children in school longer and improving the income status of poor households, they may help to reduce the child-labour problem as well. Special training programs also need to be devised for older out-of-school children, some of whom may have never attended school. Finally, special attention needs to be paid to working girls in rural areas, who constitute the largest group of out-of school children.

Introduction

In 2010, the Central Statistical Organization (CSO) of the Republic of Yemen conducted the National Child Labour Survey (CLS) in collaboration with ILO/IPEC, the Social Development Fund and UNICEF. Implemented as a stand-alone survey, the CLS covered 9,571 households containing 67,617 individuals, 23,535 of whom were children between the ages of 5-17 years. The CLS was designed to provide indicators on three main aspects of children's lives: economic activity, schooling and unpaid household services (UHS). This report documents the findings of the CLS, in particular, the prevalence and characteristics of child employment and child labour, school attendance rates, the proportion of children engaged in UHS, and the possible consequences of employment as measured by schooling outcomes.

The Republic of Yemen is situated in the southern end of the Arabian Peninsula. It is bordered by Saudi Arabia in the north and Oman in the east. With a per capita GNP of \$1,261 in 2009, Yemen is among the poorest countries in the world (CSO, 2010). Yemen suffers not only from low income, but from low human development as well. The UNDP Human Development Index places Yemen among those countries with low human development, with a rank of 154 out of 187 countries (UNDP, 2011). Furthermore, Yemen's human development rank is lower than its income rank (143 out of 187)², indicating that more could have been achieved with the current level of income.

From 2005-2010, Yemen had an estimated high annual population growth rate of 2.9 percent, primarily as a result of an estimated high total fertility rate of 5.5 births per woman (CSO, 2010). Life expectancy at birth is low, at 62 years. The 2004 Population Census put infant and child (under 5 years) mortality rates at 77.2 and 92.3 deaths per 1,000 births. Due to the high fertility rate, children under the age of 15 constitute nearly 45 percent of the population. Education outcomes in Yemen are poor, with 40 percent of the population aged 10 and above illiterate. The illiteracy rate is even higher among women, reaching 60 percent (CSO, 2010). The mean extent of education is 2.5 years, and only 12.8 percent of men and 4.7 percent of women have completed secondary education (UNDP, 2011).

The Yemeni economy relies heavily on petroleum revenues. Although it is a small oil producer, oil and gas account for a sizeable proportion of GDP and government revenue. As a result, fluctuations in oil prices deeply affect the Yemeni economy; for example, oil and gas accounted for 31.1 percent of the GDP (in current prices) in 2008, but only 18.5 percent in 2009. According to 2009 figures, services accounted for 54.9 percent of GDP, followed by industry (32%) and agriculture (12.1%). Despite its low share in the GDP and the fact that agricultural production is significantly constrained by a scarcity of water, agriculture employs approximately one-third of the work force. The climate in the northern area of the country is conducive to coffee production. Another commonly cultivated plant, khat, a mild narcotic grown primarily for the domestic market, accounted for 2.4 percent of the GDP in 2009. Livestock constitutes another important economic activity.

² Gross National Income per capita: \$2,213 (at PPP in 2005) (UNDP, 2011).

Political instability continues to be a risk factor in Yemeni development. The reunification of North (the Yemen Arab Republic) and South (the People's Democratic Republic) Yemen in 1990 under the Republic of Yemen did not eliminate the tension between the two sides. The civil war in 1994 and, more recently, the uprising in 2011 following the Arab Spring have negatively affected the already fragile economy. The most recent budget survey (2005/2006) puts the national poverty rate at 34.8 percent.

The widespread poverty, population pressure, political instability and limited opportunities for employment outside agriculture described above naturally affect the livelihoods of children. It is against this demographic and socio-economic background that the situation of working children in Yemen is examined. The remainder of this report is organized in six sections. Section 1 explains the survey methodology and the data set used in this analysis. Section 2 examines children's time-use patterns, and is divided into four main parts. Part 1 looks at the size of the child population in Yemen; Part 2 examines the prevalence of economic activity among children; Part 3 presents key school indicators; and Part 4 describes the prevalence of unpaid household services among children. Section 3 offers a closer look at the economic activities of children by providing further descriptive statistics on the nature of the work carried out by children and the conditions under which this work is performed. Section 4 presents the results of multivariate analyses of the determinants of child employment, child labour and schooling, with the aim of identifying the main correlates of these outcomes. Section 5 examines possible adverse consequences of child employment and child labour in terms of children's schooling. Section 6 concludes the report.

1. Survey methodology and data set

1.1. Sample Design

In 2010, with financial and technical support from ILO-IPEC, the Social Development Fund and UNICEF, the Central Statistical Organization (CSO) of the Republic of Yemen conducted the first National Child Labour Survey (CLS) in Yemen. The survey aimed to provide an understanding of the prevalence of child employment and child labour, the main characteristics of working children, and the potential consequences of employment as measured by school and health outcomes.³

The field survey was carried out in the month of May, towards the end of the school year.⁴ It covered 9,571 households containing 67,617 individuals, 23,535 of whom were children between the ages of 5-17 years. Of the 9,571 households selected, 7,249 (75.7%) contained at least one child between the ages of 5 and 17. The sample size was chosen so as to allow for representative estimates of key child-labour indicators for the country at large as well as for urban and rural areas.⁵

1.2. Questionnaires

The CLS questionnaire was developed based on the ILO-SIMPOC model Child Labour Survey questionnaire and adapted to reflect the data needs of Yemen. It consisted of three main parts: 1) a Household Characteristics Questionnaire; 2) an Adult Questionnaire; and 3) a Child Questionnaire. The Household Characteristics and the Adult Questionnaire were addressed to the most knowledgeable member of the household, and the Child Questionnaire was addressed to all children aged 5-17.

The Household Characteristics Questionnaire collected information on housing characteristics, ownership of durable goods and socio-economic status. It was comprised of two sections:

- Housing and Household Characteristics
- Household Socio-Economic Status

The Adult Questionnaire collected information on household composition, household members' schooling and employment status, unpaid household services carried out by children, and the perceptions of parents/guardians regarding children's employment. The adult questionnaire was comprised of the following sections:

- Household Composition and Characteristics of Household Members

³ As explained below (See Section 1.2), due to problems experienced in the administration of the survey, information on health outcomes could not be obtained.

⁴ September 2009-June 2010.

⁵ See Appendix A for the survey sampling design. As explained in the appendix, the sample size was not sufficiently large to provide estimates of child employment and child labour at the governorate level.

- Educational Attainment (ages 5 and above)
- Current Economic Activity Status (ages 5 and above)
- Usual Employment Status (ages 5 and above)
- Household Tasks (ages 5-17)
- Perceptions/Observations of Parents/Guardians about Working Children

The Child Questionnaire aimed to collect information on children's school, employment and health outcomes from children's own perspectives. The questionnaire was comprised of the following sections:

- Educational Attainment
- Current Economic Activity Status
- Health and Safety Issues for Children in Employment
- Unpaid Household Services (Chores)

Due to administrative difficulties that prevented implementation of the Child Questionnaire in a number of governorates, this analysis of working children and child labour in Yemen is based on only Parts 1 and 2 of the CLS. One consequence of this is that no analysis can be provided of working children's health and safety issues, as information on this subject was directed only towards children (on the assumption that they are best able to assess their own working conditions and risks faced at work).

1.3. Definitions of employed children and child labourers

Definitions of key concepts as they are used in the remainder of this report are provided below. (For other definitions used in the survey, see Appendix B.)

Children in employment (working children): Children (aged 5-17) are defined as working (or employed) if they worked for at least one hour during the reference period or if they had a job or business from which they were temporarily absent. The UN System of National Accounts (SNA) delineates what is and what is not an economic activity. Broadly speaking, all market-oriented activities, production of goods for own-consumption and certain services rendered for and by household members (such as major household repairs, fetching water or carrying firewood for household use) are considered economic activities, and those engaged in them are considered to be employed.

Child labour: In 2000, the Republic of Yemen ratified the two key conventions on child labour: ILO Convention No. 138 on Minimum Age and ILO Convention No. 182 on the Worst Forms of Child Labour. Accordingly, Yemen set 14 years as the minimum age for admittance to employment and recognized that children under the age of 18 cannot be employed in hazardous work. However, changes have yet to be made to the 1995 Labour Law, which recognizes children under 15 years of age as "young persons" and prohibits their employment for more than 42 hours per week (Article 48). There are no provisions in the Labour Law regarding children aged 15-17, nor is there any provision for light work.

Furthermore, regulations contained in the Labour Law exempt children who work “with their family under the supervision of the head of the family, provided that their work is performed in suitable health and social conditions” (Article 53).

For the purposes of this study, children under age 14 are considered to be too young to work for even 1 hour per week, whereas 30 hours is used as the threshold for identifying child labourers in the age group 14-17 years, in line with labour law regulations.⁶ Regardless of the number of hours of work, children engaged in work unsuitable for their capacities as children or in work that may jeopardize their health, education or moral development are considered to be child labourers. Thus, child labour includes:

- a) Children employed in hazardous industries, including mining and quarrying and construction;
- b) Children employed in hazardous occupations as defined by the Ministry of Social Affairs and Labor in conjunction with ILO Convention 182 (for a list of occupations, see Appendix C);
- c) Children aged 5-13 who are employed (even if only for 1 hour per week);
- d) Children aged 14-17 who work for more than 30 hours per week.

Economically active children: Covers children in employment as well as unemployed children. The unemployment status is only relevant for children aged 14-17.

1.4. Sample characteristics

1.4.1. Distribution of age groups

The analysis in this report is disaggregated by sex and age group. In order to ensure comparability with international studies, children are divided into three age groups, namely, 5-11-year-olds, 12-14-year-olds and 15-17-year-olds. As Table 1.2 shows, 53.8 percent of children surveyed were between the ages of 5 and 11, 24.6 percent were aged 12-14 and 21.6 percent were aged 15-17.

Table 1.2. Distribution of children by age group and sex (unweighted results) (n,%)

	Age 5-11	Age 5-11	Age 12-14	Age 15-17
Boys	12,660 (100%)	6,664 (52.6%)	3,101 (24.5%)	2,895 (22.9%)
Girls	10,875 (100%)	6,004 (55.2%)	2,695 (24.8%)	2,176 (20.0%)
Total	23,535 (100%)	12,668 (53.8%)	5,796 (24.6%)	5,071 (21.6%)

Boys represented a slightly larger proportion of surveyed children (53.8%) than girls. This is true for all age groups; however, the biggest discrepancy is observed among 15-

⁶ The regulation references daily work, which is prohibited from exceeding 6 hours. Assuming two rest days, the maximum allowable work hours per week would total 30 hours.

17-year-olds, with boys accounting for 57.1 percent of this group. (The population bias towards boys is discussed in more detail in Section 2.1 below.)

1.4.2. Distribution of children by relationship to household head

The majority (85.6%) of children surveyed are children of the household head (Table 1.3), with grandchildren also accounting for a sizeable proportion (8.25%) of the surveyed children. In contrast, the proportions of non-relatives and live-in servants among the surveyed children are very low. This pattern generally holds regardless of age group, although a larger proportion of 5-11-year-olds are grandchildren of the household head. This is not an unusual result, given that parents of younger children tend to be younger themselves and are more likely to face financial constraints that induce them to live in an extended family setting. In the case of 5-11-year-olds, 2.2 percent of mothers and 7.1 percent of fathers were absent from the household at the time of the survey. These figures are slightly higher among older children, at 3.5 percent and 9.3 percent for 12-to-14-year-olds and 6.7 percent and 13.9 percent for 15-to-17-year-olds. Overall, only 1.8 percent of 5-to-17-year-olds lived in households in which both parents were absent from the household at the time of the survey.⁷ Hence, the conclusions drawn in this report relate primarily to children who live with their parents, with or without extended family members.

Table 1.3. Relationship of surveyed children to head of household by age group (unweighted results)

	Age 5-17	Age 5-11	Age 12-14	Age 15-17
Head of household	0.17	0.02	0.14	0.59
Spouse	0.09	0.0	0.0	0.43
Son/Daughter	85.63	84.44	87.85	86.06
Daughter-in-law/son-in-law	0.25	0.0	0.05	1.08
Grandchild	8.25	11.02	6.02	3.87
Brother/sister	3.54	2.36	4.09	5.86
Other relative	2.05	2.14	1.83	2.09
Servant (live-in)	0.01	0.01	0.0	0.02
Non-relative	0.01	0.01	0.02	0.0
No. of observations	23,535	12,668	5,796	5,071

⁷ 1.9 percent, according to weighted figures.

2. Employment, schooling and unpaid household services of children

In this section of the report, the results of the 2010 National Child Labour Survey are presented in four parts. Part 1 details the size of the child population in Yemen and its relative magnitude in terms of the total population. Part 2 discusses the prevalence of employment among children and the extent of hours worked. Part 3 examines children's schooling, including basic schooling indicators, namely, school attendance, grade for age, and highest schooling level achieved. Part 4 discusses unpaid household services on the basis of participation and hours spent on these activities.

2.1. Size of the child population

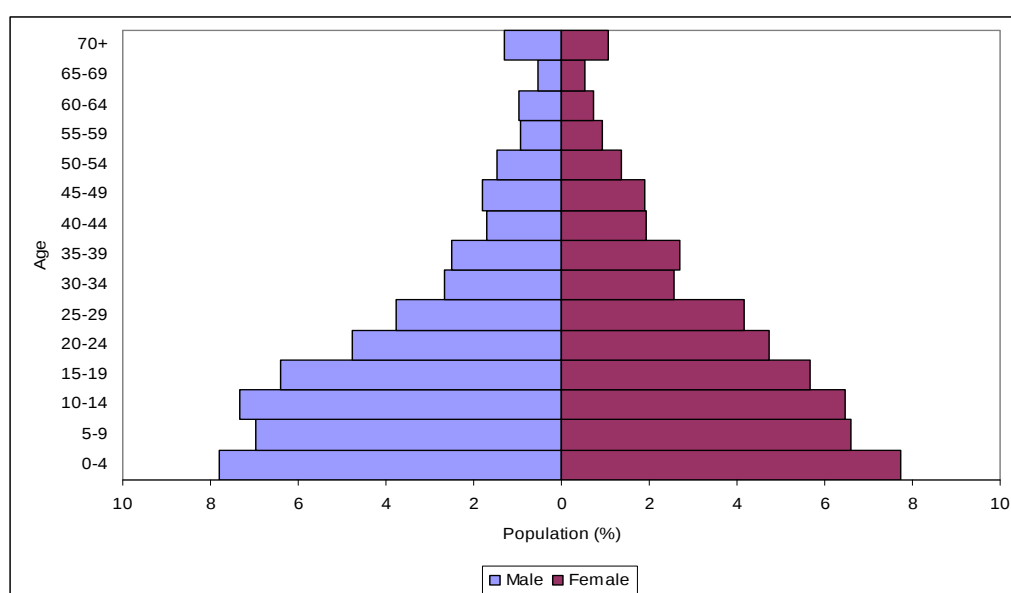
The population of Yemen is estimated at 22,492,000, 34.3 percent of which is comprised of children between the ages of 5-17. The population pyramid given in Figure 2.1 has a wide bottom that quickly narrows at older ages illustrating high fertility and short longevity. Indeed, the youngest age group (0-4-year-olds) has the highest share in the population (15.5%). In contrast, individuals aged 70 or older constitute only 2.3 percent of the population.

One peculiar aspect of the population structure in Yemen is the higher share of boys in the 5-to-17-year age group when compared to girls. While the male-female ratio is 1.01 among 0-to-4-year-olds, this figure increases to 1.06 among 5-to-9-year-olds and to 1.13 among 10-to-14- and 15-to-19-year-olds. Overall, the male-female ratio among children aged 5-17 is estimated at 1.12.⁸ This difference may be explained by a variety of different phenomena, e.g. higher mortality among girls or migration out of the country. Although it is not possible to pinpoint the reason for the male bias in the child population using the available data set, the fact that this bias is very slight among the 0-4-year group⁹ suggests that other factors besides selective mortality are at play. Indeed, the 2004 Population Census shows infant and child mortality rates (of children under age 5) to be slightly higher among boys (79.10 and 92.99 per thousand, respectively) than among girls (75.04 and 91.66 per thousand, respectively) (CSO, 2010). A plausible explanation for the increasing male-female ratio in the 5-17-year age group is girls' migration out of the country for marriage or for work.

⁸ A male-female ratio of 1.06 for children younger than 15 is generally expected in societies where there is no male bias.

⁹ At birth, 105 boys to 100 girls are expected (Sen, 1990). Empirical evidence around the world in countries where a male bias does not exist puts this figure between 103-107 boys to 100 girls. Hence, the figure obtained from the CLS is slightly low.

Figure 2.1. Population pyramid by age and sex



2.2. Employment of children

2.2.1. Current employment status of children

An estimated 1,614,000 children aged 5-17 work in Yemen. This figure represents 21.0 percent of the child population in this age group. When children who are looking for work are also taken into account (note that unemployment status is asked of older children only), the number of economically active children increases to 1,634,000, representing an estimated labour force participation rate of 40.4 percent among 15-17-year-olds.¹⁰ The prevalence of employment increases with age: whereas 11.0 percent of 5-11-year-olds are employed, 28.5 percent of 12-14-year-olds and 39.1 percent of 15-17-year-olds are employed.

Table 2.1. Prevalence of employment by age – short reference period

	Age 5-17	Age 5-11	Age 12-14	Age 15-17
Child population	7,702,982	4,262,154	1,890,208	1,550,621
Working (n)	1,613,987	468,722	538,829	606,436
Working (%)	21.0%	11.0%	28.5%	39.1%

Note: Reference period is the week preceding the survey.

¹⁰ The labour force participation rate is the sum of employed and unemployed divided by the working age population. It is equal to the employment rate for younger children.

Table 2.2. Prevalence of employment by age and sex – short reference period

	Age 5-17		Age 5-11		Age 12-14		Age 15-17	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Child population	4,062,116	3,640,867	2,224,354	2,037,799	992,042	898,165	845,720	704,902
Working (n)	882,302	731,684	218,619	250,103	284,576	254,253	379,108	227,328
Working (%)	21.7%	20.1%	9.8%	12.3%	28.7%	28.3%	44.8%	32.3%

Note: Reference period is the week preceding the survey.

The prevalence of work is only slightly higher among boys as compared to girls (Table 2.2). While 21.7 percent of boys aged 5-17 are employed, this figure is 20.1 percent among girls. The higher employment rate of boys is driven by their distinctly higher employment rate in the 15-to-17-year age group, in which 44.8 percent of boys are employed, compared to only 32.2 percent of girls. Among younger children, however, the employment rate of girls is either higher or on par with that of boys. The increase in the gap between girls' and boys' employment rates that occurs with age is indicative of a firm establishment of gender roles following puberty.

Rural children have distinctly higher average employment rates than urban children (Figure 2.2). While the employment rate among 5-to-17-year-olds is 7.6 percent in urban areas, this figure increases to 25.5 percent in rural areas. In fact, it is the high employment rate of rural children that pushes the overall national rate of child employment to 21 percent. Notably, the employment rate in urban areas does not surpass 20 percent even among older children aged 15-17, and among young children aged 5-11, it is as low as 2.5 percent. In contrast, these figures are remarkably high among rural children, at 46.4 percent of children aged 15-17 years and 13.8 percent among those aged 5-11.

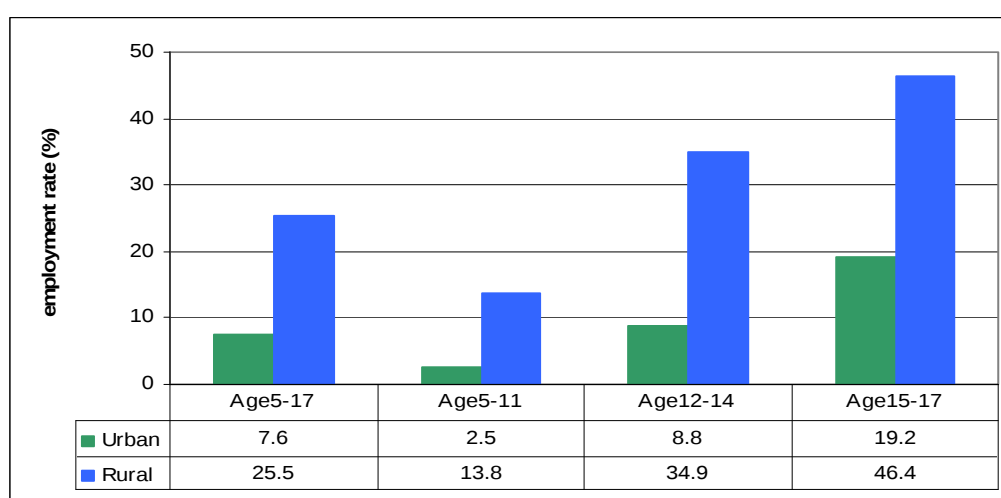
Figure 2.2. Employment rate by age and residence

Figure 2.3. Employment rate by age, sex and residence

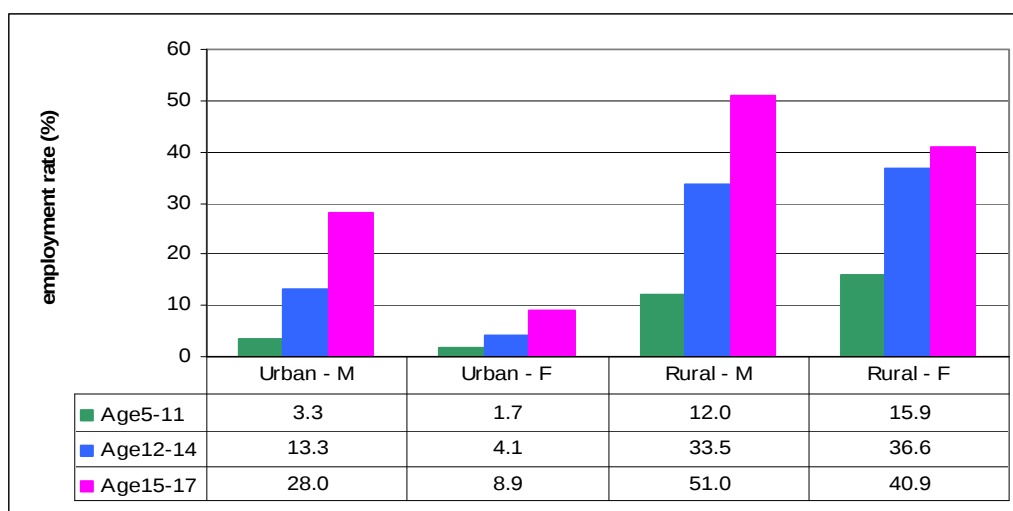
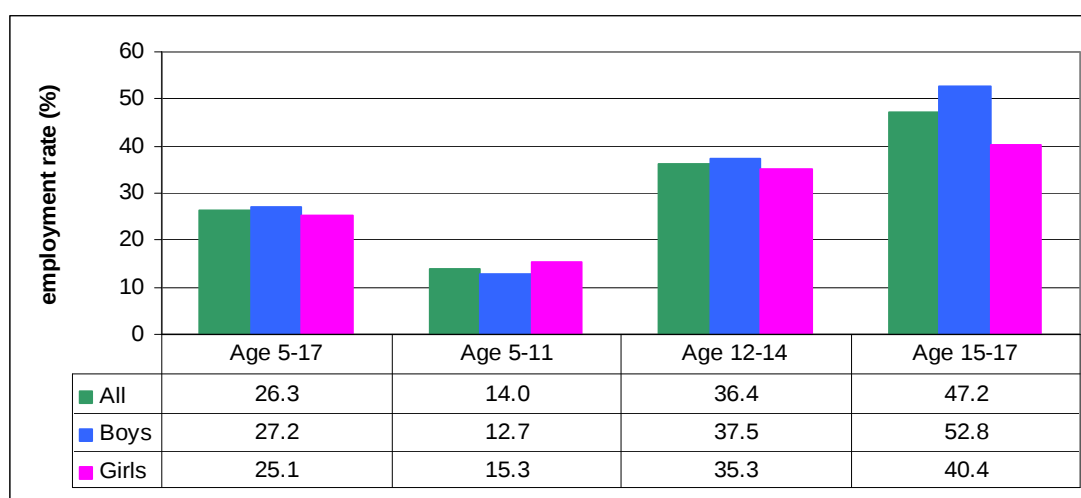


Figure 2.3 shows the employment rate of children in urban and rural areas by age and sex. In urban areas, the employment rate among girls is considerably lower than among boys, regardless of age group. In contrast, in rural areas, girls' employment is only lower than boys' employment among older children aged 15-17, whereas girls' employment actually surpasses that of boys among children aged 5-11 and those aged 12-14. Moreover, among all age groups, employment rates of rural girls exceed those of urban boys by a wide margin. These findings indicate that households are not reluctant to allow girls to enter into employment, provided appropriate work is available to them. (This subject is examined in more detail in Section 3.2.)

2.2.2. Usual employment status of children

Whereas the employment figures presented in Section 2.2.1 above are based on CLS data on children's economic activity during the week preceding the survey, the CLS also collects information on children's involvement in economic activity based on a reference period of the previous 12 months.

Figure 2.4. Employment rate by age and sex – long reference period



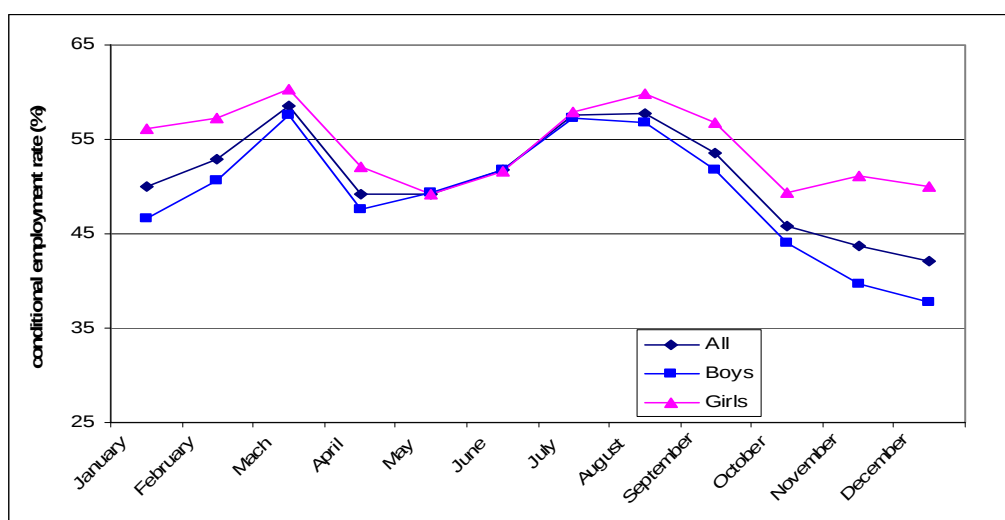
Note: The reference period is the 12 months preceding the survey.

Using this longer reference period, the estimated employment rate of children aged 5-17 increases to 26.3 percent (Figure 2.4). This change represents an increase of over one-quarter in the proportion of working children when compared to the shorter reference period (Table 2.1), indicating a strong seasonality in child employment. The increase in the rate of child employment with the use of a longer reference period has a greater effect on the employment rates of younger children than older children: while the employment rates of 5-to-11-year-olds and 12-to-14-year-olds increase by about 27 percent, the employment rate of 15-to-17-year-olds increases by 21 percent. These findings indicate that work has more of a permanent nature for older children than for younger children.

Overall, the longer reference period increases the employment rates of girls and boys by about 25 percent, with the employment rates of younger boys the most sensitive to the chosen reference period. With a shift from a short reference period to a long one, the employment rates of boys aged 5-11 and aged 12-14 increase by 30 percent and 31 percent, respectively, compared to corresponding increases of 24 percent and 25 percent, respectively, among girls. In contrast, the increase in the employment rate of older boys aged 15-17 that occurs with a change in the reference period is smaller than that of girls (18 percent and 25 percent, respectively).

A large proportion of working children – 61.3 percent – works year-round. The proportion of girls who work throughout the year (70.3%) is larger than that of boys (53.9%). The seasonality of child work is illustrated in Figure 2.5. On average, boys work fewer months (9.2) than girls (10.4), with peaks in child employment observed, unsurprisingly, in the months of July and August. March is also a busy month, with about 60 percent of girls who work at some point during the year employed in the months of August and March; corresponding rates for boys are 57-58 percent. The seasonality in girls' employment is less pronounced than that of boys: Among girls, employment rates between high and low seasons differ by a maximum of 11 percentage points, compared to as much as 20 percentage points among boys (Figure 2.5).

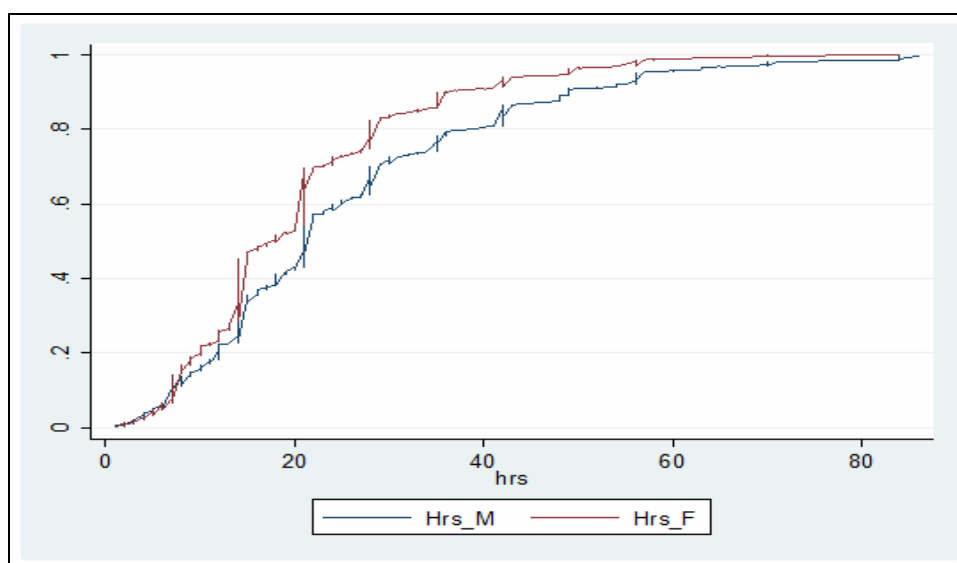
Figure 2.5. Seasonality in child work



2.2.3. Work hours of children

The number of hours worked in the reference week, another indicator of labour supply, includes the hours worked in a child's main job as well as in any additional jobs held during the reference week. (About 5 percent of employed children had another job in addition to their main job during the reference week.) According to CLS estimates, children were employed for a mean 23 hours per week. On average, boys are estimated to work for longer hours (25.3) than girls (20.3). In addition to illustrating the cumulative distribution of hours worked, Figure 2.6 shows that a large proportion of children work for more than 30 hours per week – the national cut-off after which work is deemed harmful for children – and that this rate is greater among working boys (27%) than among working girls (16%).

Figure 2.6. Cumulative distributions of work hours by sex



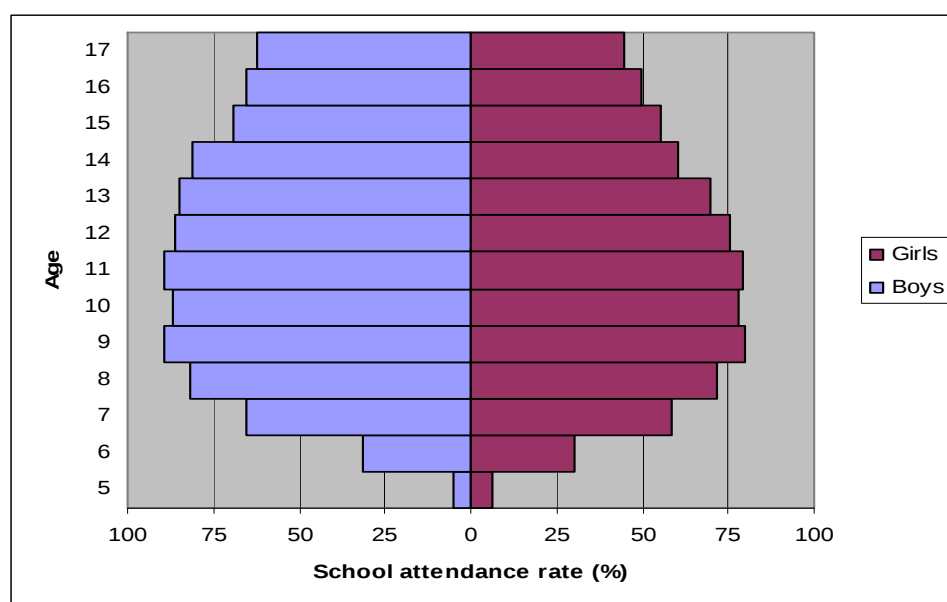
2.3. Schooling of children

Compulsory basic education (i.e. primary school) in Yemen lasts for nine years and covers children ages 6-14. Basic education is followed by secondary education, which lasts for three years¹¹ and includes options ranging from general secondary education, which prepares students for university education, to vocational training. Neither secondary nor pre-school education is compulsory.

2.3.1. School attendance

Overall, the average school attendance rate among 5-17-year-olds is estimated at 66.3 percent. Boys' average school attendance is substantially higher (72.4%) than girls' (59.5%). Among compulsory-school-aged children (6-14), the average school attendance rate is 73.6 percent, although a substantial gender gap exists: while boys in this age group have a school attendance rate of 79.6 percent, the rate among girls is only 67.1 percent. Moreover, what is a 13-percentage-point gender gap among children of compulsory school age increases to 19 percentage points among older children, with the school attendance rate of 15-17-year-old boys estimated at 68.6 percent, as compared to 49.3 percent of girls.

Figure 2.7. School attendance pyramid



The age-school attendance pyramid¹² given in Figure 2.7 provides more detailed information about the school attendance rates of children. Several points are worth mentioning: First, pre-school education is rare, with only 5.4 percent of 5-year-olds attending school; second, despite expectations that 6-year-olds will start compulsory

¹¹ Children who do not want to enroll in secondary education may choose to enroll in a two-year vocational school; however, very few children covered by the CLS chose this track.

¹² This exposition follows Orazem and King's (2008) age-enrollment pyramids.

schooling, few actually do,¹³ with significantly higher average school attendance rates of 8- and 9-year-olds in comparison to 6- and 7-year-olds indicating that many children delay starting school; third, boys' school attendance surpasses girls' at all ages, with the gap growing larger beyond age 14; and fourth, a sharp drops in schooling – especially for boys – occurs beyond age 14, which marks the end of compulsory schooling.

Figure 2.8. School attendance pyramid in urban areas

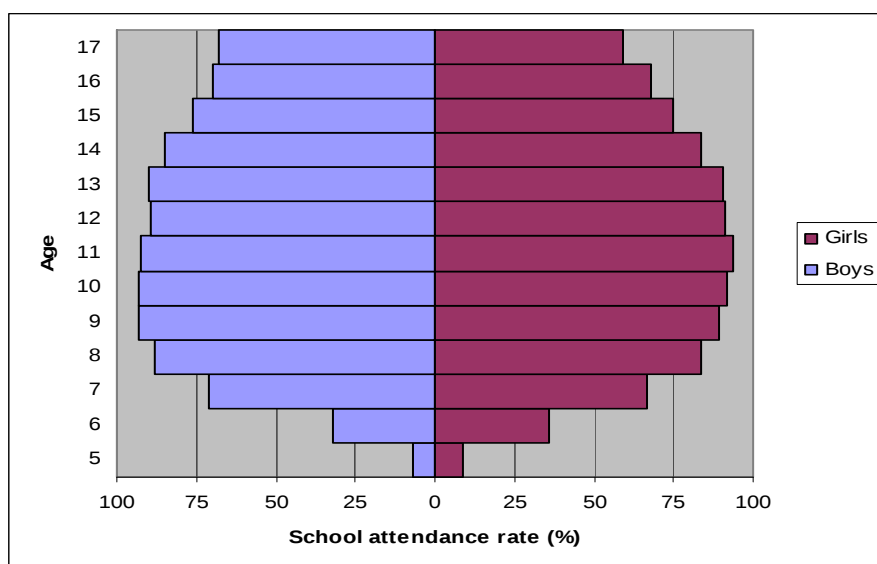
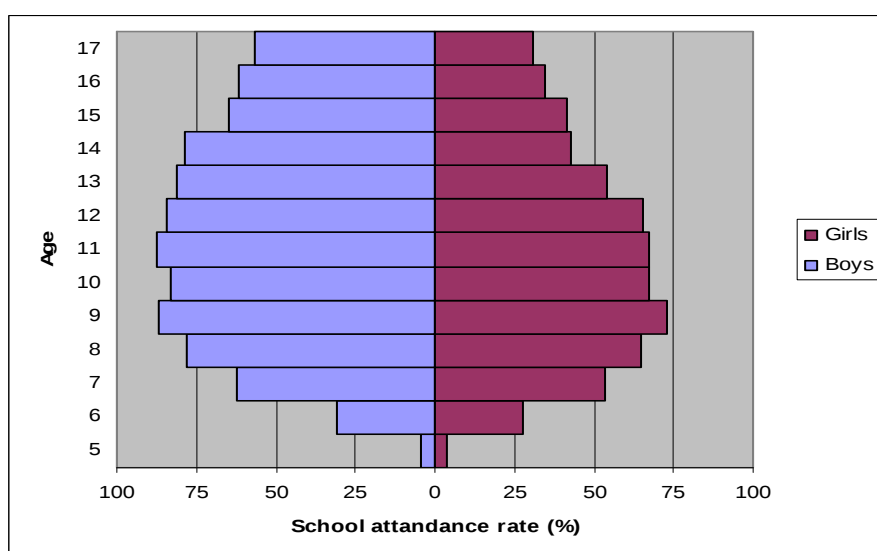


Figure 2.9. School attendance pyramid in rural areas



¹³ The low school attendance rate of 6-year-olds might be due in part to the timing of the survey. As noted earlier, the survey was fielded towards the end of the school year in May 2010, and some children who turned six after the start of the current school year could still have enrolled in school at the age of 6 in September 2010.

A comparison of the school attendance pyramids for urban and rural areas (Figures 2.8 and 2.9, respectively) illustrates the considerably better attendance rates of both boys and girls in urban areas as compared to rural areas. Among children aged 5-17, the average school attendance rates in urban and rural areas are 76.8 percent and 62.8 percent, respectively. However, these figures mask important differences by sex, whereas a visual comparison of Figures 2.8 and 2.9 clearly reveals the disadvantaged status of rural girls. While the average school attendance rates of boys and girls in urban areas are very similar (77.9% vs. 75.6%), in rural areas, there is a substantial gap, with the average school attendance rate of boys (70.6%) surpassing that of girls (54.0%) by close to 17 percentage points. What is also apparent from the school attendance pyramids is that the drop in school attendance beyond compulsory schooling is sharper for girls and boys living in rural areas than those in urban areas. In rural areas, the drop for boys occurs beyond 14 years of age, but for girls it occurs earlier, at around 13 years, suggesting that a significant proportion of girls fail to finish even basic compulsory education. (This phenomenon is examined in greater detail during the discussion of grade attainment below).

Table 2.3. School attendance by age, residence and sex

	Urban				Rural			
	Age 6-14		Age 15-17		Age 6-14		Age 15-17	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
School attendance (%)	84.4	83.5	78.1	70.4	78.0	61.6	65.1	41.5
Gender gap (% point)	0.9		16.4		7.7		23.6	

Table 2.3 summarizes the gender schooling gap in urban and rural areas by examining the population of compulsory-school-aged children separate from the population of older children. (Pre-school attendance among 5-year-olds is very low, so these children are omitted as well.) As noted earlier, while there is hardly any school attendance gap between boys and girls of compulsory school age in urban areas, the gap is 16.4 percentage points among older children in urban areas. A similar worsening of the gender schooling gap is observed in rural areas, where a 7.7 percentage-point gap among compulsory-school-aged children increases to 23.6 percentage points among 15-17-year-olds, due in part to the very low average school attendance rate among rural girls aged 15-17 (41.5%).

2.3.2. Grade-for-age among school-going children

Table 2.4 provides information on the grade level of children who attended school during the 2009/2010 school year.¹⁴ Of the 6-year-olds attending school, 86.3 percent were in the first grade; among 7-year-olds, this figure is 71.1 percent; and among 8-year-olds, 27 percent. The rather high proportions of first-graders among 7- and 8-year-olds are likely related to the late entry of children into the schooling system,¹⁵ which would also partly explain the dispersal of children among multiple grades that is observed after age 9. For example, 15.1 percent of 10-year-olds were in the second grade, 35.1 percent were in the third grade, and 36.8 percent were in the fourth grade; if all children started school at age 6

¹⁴ Children who dropped out during the 2009/2010 school year prior to the survey are not included due to a lack of information on grade attainment for these children.

¹⁵ The timing of the survey may have affected this finding (See Footnote 11).

and did not repeat any grade, at age 10, they would all be fifth-graders, but in fact, only 9.1 percent were in the fifth grade, suggesting that the observed dispersion in schooling is also due in part to grade repetition.¹⁶

Table 2.4. Distribution of currently enrolled children by school level and grade

	Age 6	Age 7	Age 8	Age 9	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15	Age 16	Age 17
Pre-school	9.3	2.6	0.9									
Primary 1	86.3	71.1	27.0	8.2	3.8	1.1	1.0	0.7				
Primary 2	4.4	25.1	57.9	30.8	15.1	5.3	3.0	2.0	1.0	0.2		0.7
Primary 3		1.2	13.4	45.9	35.1	13.4	9.6	4.0	2.7	1.6	0.4	0.6
Primary 4			0.9	14.7	36.8	32.3	14.9	8.3	5.5	2.8	1.2	0.4
Primary 5			0.1	0.5	9.1	38.1	28.6	15.4	8.6	3.6	1.5	0.4
Primary 6					0.1	9.2	31.8	27.9	13.3	8.4	5.6	2.4
Primary 7						0.6	10.0	29.7	22.7	14.7	9.3	5.8
Primary 8							1.0	10.3	32.8	19.8	15.7	5.3
Primary 9							0.1	1.1	11.9	34.1	24.5	17.0
Secondary 1								0.1	1.2	11.5	28.1	24.7
Secondary 2								0.5	0.2	2.9	11.4	29.9
Secondary 3									0.1	0.3	2.4	12.8

Although the CLS does not directly provide information on grade-repetition, it is possible to gain some understanding about the degree of this phenomenon by comparing the flow of children from one grade to the next (Table 2.4). For example, Table 2.4 shows that 45.9 percent of 9-year-olds were in the third grade. Without grade repetition, this group of children would become fourth-graders a year later; however, as the table shows, only 36.8 percent of 10-year-olds were in the fourth grade. Furthermore, a larger proportion of 10-year-olds were in Grade 3 than the grade distribution at age 9 would suggest. Hence, it is clear that sizeable proportions of children at these ages fail to progress on to the next grade. Assuming no new students start or leave school at age 10 (and no data errors), a comparison of grade distributions at ages 9 and 10, i.e. the flow from one grade to the next, suggests a grade repetition rate of 35 percent. A comparison of grade distributions at ages 10 and 11 appears to indicate a smoother transition; however, it cannot necessarily be concluded that this is due to low grade repetition. In fact, this finding is more likely due to drop-out. As Figure 2.5 shows, the proportion of children attending school falls at age 11, and to the extent that children who drop out of the schooling system are less successful and thus more likely to repeat a grade, the grade distribution of children currently attending school appears better than it would have had the drop-outs remained in the system. Another sizeable drop in the school-attendance rate occurs among 15-year-olds. Again, as with the transition between ages 10 and 11, a comparison of grade-for-age of 14- and 15-year-olds appears to indicate a low level of grade-repetition, but is more likely to be an artefact of large drop-outs

¹⁶ The timing of the survey may have affected this finding (See Footnote 11).

from the schooling system. At age 17, only 12.8 percent of school-going children were in their final year of secondary school.

2.3.3. Highest school qualifications and out-of-school children

Although there is no data on the highest grade levels attained by out-of-school children, information is available showing whether a child ever attended school and if so, the highest school qualification obtained, if any. Among 6-to-17-year-olds, 20.2 percent never attended school. As noted earlier, this low estimated rate could be related to children's late entry into the schooling system; indeed, when 9-to-17-year-olds are considered, the proportion who never attended school decreases – but nevertheless, remains high – at 12.6 percent. Among this age group, proportions of children never attending school are higher among rural children than urban children (15.7% vs. 11.3%) and among girls than boys (19.9% vs. 14.4%). Moreover, by the time they reached age 17, 22.8 percent of girls and 16.9 percent of rural children had never attended school.

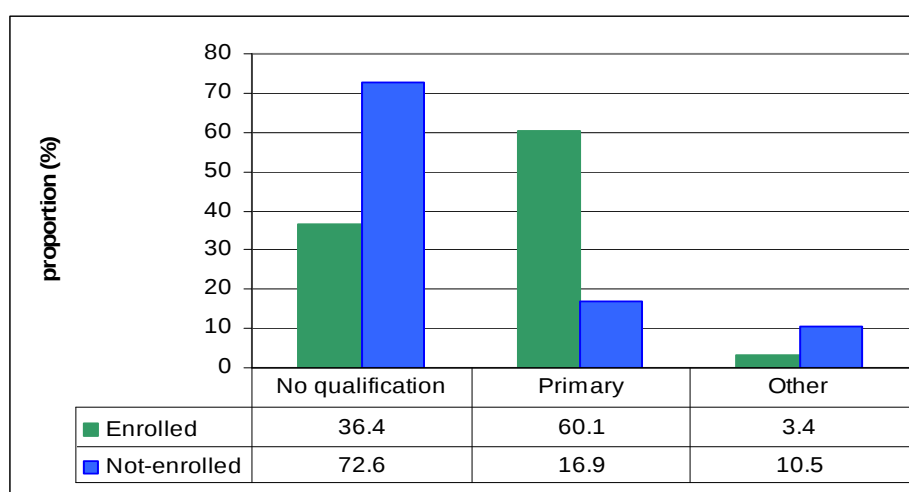
Among children aged 15-17¹⁷ currently or previously attending school, 67.6 percent had no school certificate, 27.8 percent had a primary school certificate (Intermediate School Certificate) and 1.4 percent also had a General Secondary Education Certificate. When only 17-year-olds are considered, the proportion of children without certification drops sharply, but nonetheless remains high, at 49.1 percent, whereas the rate of primary school certification increases to 45 percent and that of secondary school certification to 3.7 percent.¹⁸

When school-going children and school drop-outs are considered separately, a large discrepancy emerges between those with and without qualifications. Among 17-year-olds who do not currently attend school, for example, the proportion of children without any school certification is twice as high as that of 17-year-olds who are currently in school (Figure 2.10), and the proportion with primary school certification is 5 times higher. These figures suggest that the majority of children not currently in school have, in fact, dropped out without completing compulsory schooling.

¹⁷ Since the earliest time children obtain a school certificate is when they finish primary school, we only consider children ages 15 through 17.

¹⁸ In addition, a small proportion of children (0.3%) have vocational school certificates.

Figure 2.10. School certification of 17-year-olds by school attendance



2.4. Unpaid household services of children

2.4.1. Prevalence of unpaid household services among children

Over half of children are estimated to engage in unpaid household services (UHS) (Table 2.5). The prevalence of this type of activity increases with age, from 34.7 percent among 5-11-year-olds to 67.8 percent among 12-14-year-olds and 74.5 percent among 15-17-year-olds.

A larger proportion of girls than boys are engaged in unpaid household services: while 60.5 percent of girls are engaged in UHS, this figure is 42.2 percent among boys (Table 2.6). The gender gap in UHS increases as children get older (Tables 2.5 and 2.6), from 13 percentage points among 5-11-year-olds to 26 percentage points among 12-14- and 15-17-year olds.

Table 2.5. Prevalence of unpaid household services by age

	Age 5-17	Age 5-11	Age 12-14	Age 15-17
Child population	7,702,982	4,262,154	1,890,208	1,550,621
UHS (n)	3,913,874	1,476,822	1,282,359	1,154,693
UHS (%)	50.8%	34.7%	67.8%	74.5%

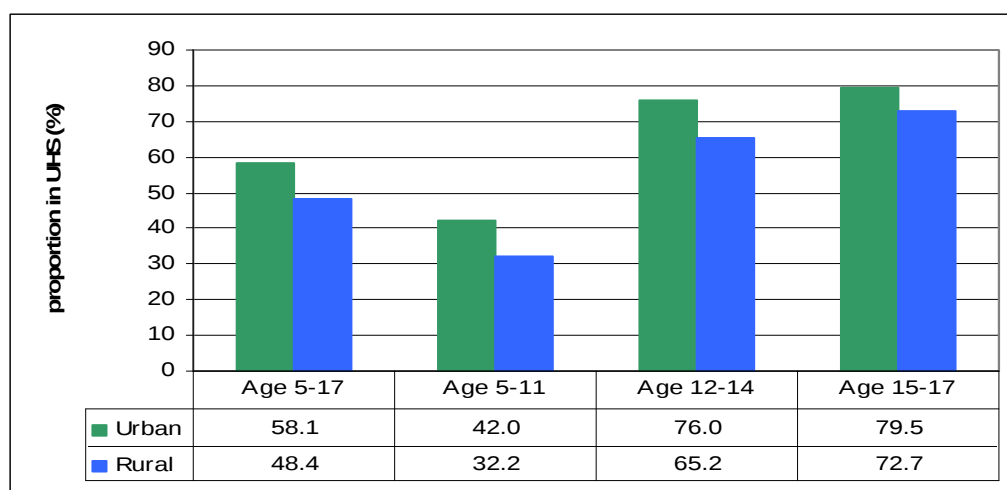
Note: Reference period is the week preceding the survey.

Table 2.6. Prevalence of unpaid household services by age and sex

	Age 5-17		Age 5-11		Age 12-14		Age 15-17	
	Boys	Girls	Boys	Girls	Boys	Girls	Boys	Girls
Child population	4,062,116	3,640,867	2,224,354	2,037,799	992,042	898,165	845,720	704,902
UHS (n)	1,711,903	2,201,971	635,797	841,026	548,549	733,810	527,557	627,135
UHS (%)	42.2%	60.5%	28.6%	41.3%	55.3%	81.7%	62.4%	89.1%

Note: Reference period is the week preceding the survey.

Figure 2.11. UHS prevalence by place of residence



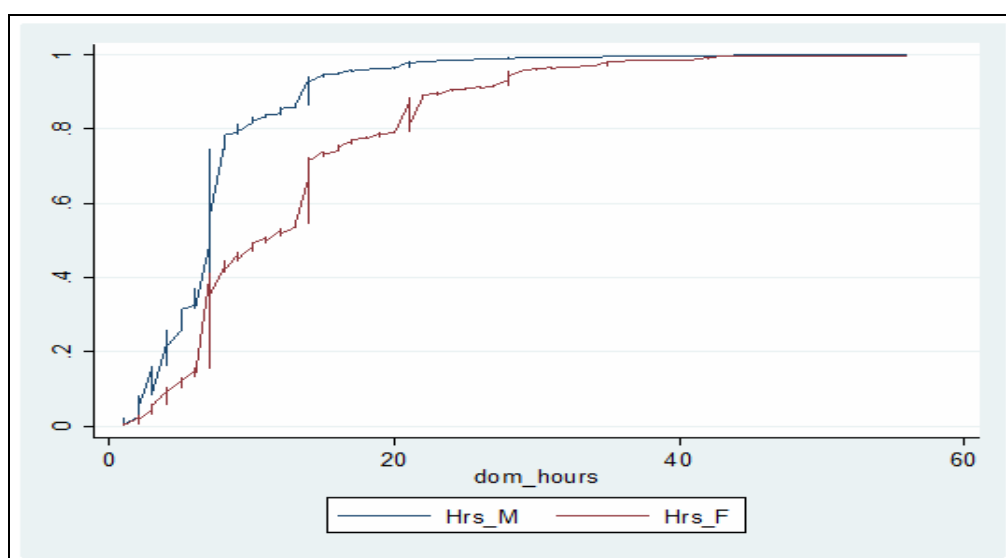
The prevalence of UHS is higher among children living in urban areas as compared to rural areas (Figure 2.11). Overall, a difference of roughly 10 percentage points exists in UHS prevalence between urban and rural children (58.1% vs. 48.4%). Differences are observed for all age groups, although the gap is slightly lower among children aged 15-17. The lower estimated prevalence of UHS among rural children might be related to their greater involvement in economic activities as well as to their underreporting of certain UHS conducted in tandem with economic activity.¹⁹

2.4.2. Hours of unpaid household services among children

On average, children devote 10.5 hours per week to UHS. Time input varies by sex, with girls spending more hours per week engaged in UHS (12.8) than boys (7.5). Figure 2.12 shows clearly that this holds true at all parts of the distribution; moreover, it also illustrates that only a very small proportion of boys and girls devote excessive hours (more than 30 hours/week) to UHS.

¹⁹ For instance, it is likely that older children who mind younger siblings while carrying out agricultural work will only report their primary activity and omit reporting child care as a secondary activity.

Figure 2.12. Cumulative distributions of UHS hours by sex



When urban and rural children are compared, a smaller proportion of rural children than urban children are found in UHS; however, on average, rural children who do perform UHS spend more time per week on this activity (11.1 hours) than urban children (9.1 hours).

2.4.3. Types of unpaid household services

The types of UHS carried out by children appear to be strictly gendered (Figure 2.13). Over 90 percent of boys who are engaged in UHS run errands and do shopping for the household, whereas less than 10 percent of them perform other UHS such as cooking, cleaning, washing and caring. In contrast, girls who are engaged in UHS mostly perform cleaning, cooking, washing and caring activities, with relatively few (12.8%) shopping or running errands for the household.

Figure 2.13. Type of unpaid household services of children by sex

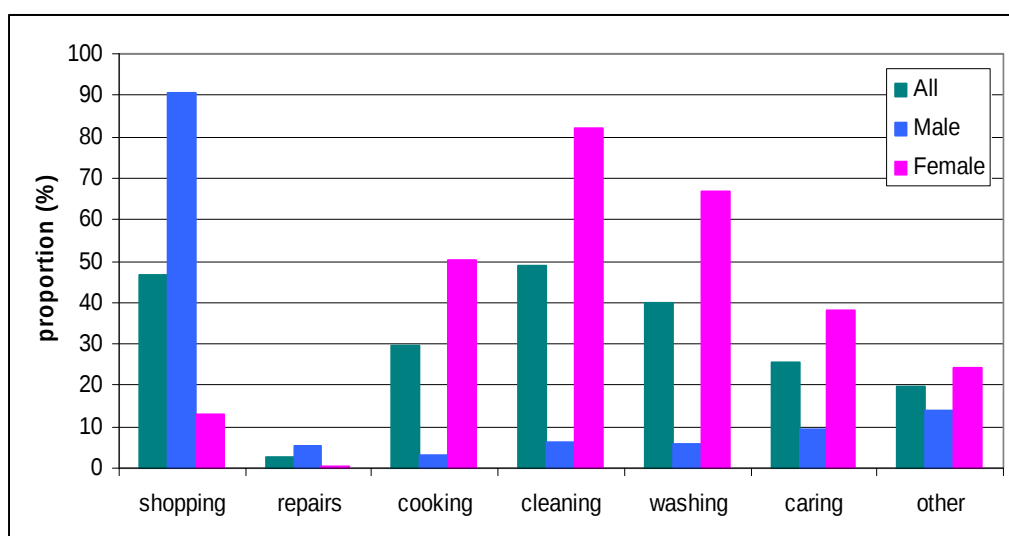
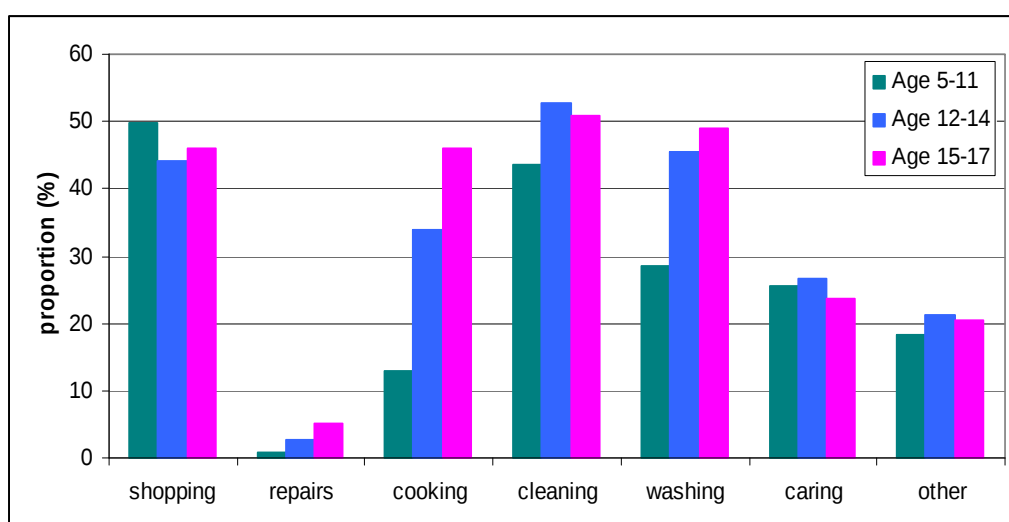


Figure 2.14. Type of unpaid household services of children by age



The types of UHS carried out by children also differ somewhat by age. Whereas activities such as cooking, cleaning and washing are more commonly carried out by older children, activities such as shopping and caring do not vary greatly among age groups (Figure 2.14).

The above findings appear to suggest that in the division of labour along age lines (which is partially an indication of physical strength) and gender lines, the latter takes precedence over the former with regard to UHS. For example, despite the fact that cooking is a type of UHS requiring physical strength as well as a certain degree of knowledge and maturity (due to potential risks involved in this activity), the proportion of younger girls aged 5-11 who engage in cooking (20.7%) surpasses that of older boys aged 15-17 (4.3%) engaged in this activity by a wide margin.

2.5. Children in multiple activities²⁰

Almost half of children aged 6-17 engage in multiple activities (Table 2.7). The most common time-use pattern combines schooling with UHS (29.6%), although an almost equally high proportion of children (29%) attend school without engaging in either UHS or employment (i.e. economic activity), and a non-negligible proportion (4.3%) combine schooling with UHS as well as employment. Another 8.3 percent of children engage in UHS without attending school or engaging in economic activity, and 7.3 percent combine UHS and employment without attending school. Other less frequently observed time-use patterns include combining school and employment (3.5%) and engaging exclusively in employment (3.0%), and slightly more than 10 percent of children are not engaged in any of the three activities examined here.

²⁰ This section covers children ages 6-17, since compulsory schooling does not start until age 6 and very few 5-year-olds attend pre-school.

Table 2.7. Children (aged 6-17) engaged in multiple activities by sex

	All	Boys	Girls
School + Employment + Unpaid household services	615,000 8.5%	331,000 8.7%	284,000 8.4%
School + Employment	251,000 3.5%	214,000 5.7%	36,000 1.1%
School + Unpaid household services	2,130,000 29.6%	1,049,000 27.7%	1,081,000 31.8%
Employment + Unpaid household services	523,000 7.3%	163,000 4.3%	361,000 10.6%
School only	2,085,000 29.0%	1,331,000 35.1%	753,000 22.2%
Employed only	217,000 3.0%	171,000 4.5%	46,000 1.4%
Unpaid household services only	594,000 8.3%	143,000 3.8%	451,000 13.3%
Inactive (Idle)	773,000 10.7%	390,000 10.3%	383,000 11.3%
All 6-17-year-olds	7,191,000	3,793,000	3,398,000

Table 2.8. Children (aged 6-17) engaged in multiple activities by age

	Ages 6-11	Ages 12-14	Ages 15-17
School + Employment + Unpaid household services	197,000 5.3%	226,000 12.0%	191,000 12.3%
School + Employment	101,000 2.7%	91,000 4.8%	59,000 3.8%
School + Unpaid household services	904,000 24.1%	732,000 38.7%	494,000 31.8%
Employment + Unpaid household services	108,000 2.9%	166,000 8.8%	249,000 16.1%
School only	1,489,000 39.7%	412,000 21.8%	184,000 11.8%
Employed only	53,000 1.4%	56,000 3.0%	108,000 6.9%
Unpaid household services only	215,000 5.7%	159,000 8.4%	221,000 14.2%
Inactive (Idle)	680,000 18.1%	49,000 2.6%	45,000 2.9%
Total children	3,750,000	1,890,000	1,551,000

The time-use patterns of boys and girls show considerable differences. A much larger proportion of boys (35.1%) as compared to girls (22.2%) go to school without engaging in any other activity (Table 2.7). In contrast, larger proportions of girls combine unpaid household services with schooling (31.8% vs. 27.7%) or employment (10.6% vs. 4.3%), or are solely engaged in UHS (13.3% vs. 3.8%). Non-negligible proportions of both boys and girls are engaged in employment alone, but the rate is higher among boys than girls (4.5% vs. 1.4%).

Time-use patterns also differ by age (Table 2.8), with the most significant difference observed in the proportion of children who attend school exclusively without engaging in economic activity or UHS. Here, the largest proportion is seen among 6-11-year-olds (39.7%), followed by 12-14-year-olds (21.8%) and 15-17-year-olds (11.8%). In other words, as children grow older, they tend to combine schooling with other activities, the most common being unpaid household services. The proportion of children engaged exclusively in employment also tends to increase with age, from 1.4 percent of 5-to-11-year-olds to 3 percent of 12-to-14-year-olds and 6.9 percent of 15-to-17-year-olds. Likewise, the proportions of both children combining employment with unpaid household services and children engaging solely in UHS increase with age. In contrast, the proportion of children engaged in none of these three activities drops as children grow older, with only 2.9 percent of all children found to be “idle”; of these, over three-quarters are under age 9, and among girls, the proportion of under nine-year-olds among ‘idle’ children reaches 80 percent. The relatively high rate of “idleness” among young children is not surprising, given the earlier findings that children tend to delay school entry. In fact, when parents are asked why their young children are not enrolled in school, 68.7 percent say that they are “too young to attend school”. Other reasons given include “cannot afford schooling” (6.1%), “not interested in school” (5.8%) and “school too far” (4.7%).

3. Nature of children's employment and child labour

This section of the report takes a closer look at the nature of children's employment as measured by sector of economic activity, occupation, status in employment and earnings. It also provides measurements of the prevalence of child labour, another important objective of the CLS.

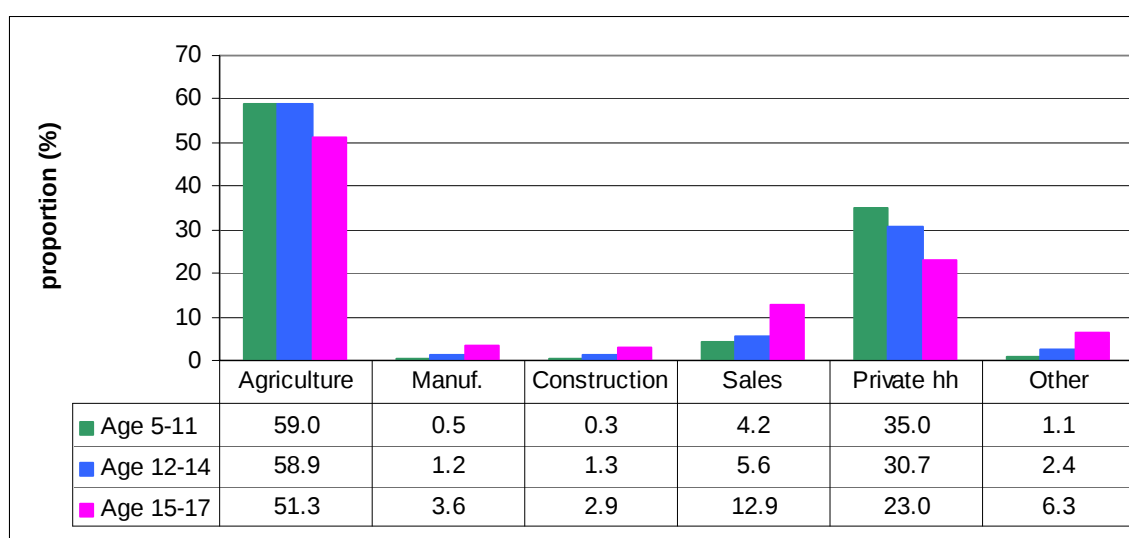
3.1. Economic activity

Yemen's limited economic base is reflected in the economic activities of children, who are mainly employed in agriculture, wholesale and retail trade, and private households. In total, 56.1 percent of working children are engaged in agricultural activities, 29.0 percent in private households and 7.9 percent in wholesale and retail trade (Table 3.1). The distribution of boys and girls across these three activities differs, with over half of girls employed in private households and another 44.8 percent in agriculture. In contrast, over 65 percent of boys are in agriculture, and only 10 percent in private households, while another 13.2 percent are engaged in wholesale and retail trade. The gendered patterns of employment are likely to be the result of cultural values that discourage women's contact with men who are not family members.

Table 3.1. Distribution of employed children by type of economic activity and sex

Economic activity (ISIC rev3.1)	All	Boys	Female
Agriculture, hunting, forestry and fishing	905,000 56.1%	577,000 65.4%	328,000 44.8%
Manufacturing	31,000 1.9%	24,000 2.7%	7,000 1.0%
Construction	26,000 1.6%	25,000 2.8%	<1000 0.1%
Wholesale and retail trade	128,000 7.9%	117,000 13.2%	11,000 1.5%
Private households	468,000 29.0%	88,000 10.0%	380,000 52.0%
Other activities	56,000 3.5%	51,000 5.8%	5,000 0.7%
Employed children	1,614,000 100%	882,000 100%	732,000 100%

Figure 3.1. Distribution of employed children by economic activity and age



Although smaller than the variations observed between boys and girls, variations are also observed in the types of economic activity engaged in by younger and older children. For example, younger children are engaged in agricultural activities and in private households at higher rates than older children, with 59.0 percent of 5-11-year-olds and 12-14-year-olds found in agriculture, compared to 51.3 percent of 15-17-year-olds. Similarly, while 35 percent of 5-11-year-olds are found in private households, this figure drops to 30.7 percent among 12-14-year-olds and to 23 percent among 15-17-year-olds. A sizeable proportion (12.9%) of 15-17-year-olds is also found in wholesale and retail trade.

3.2. Occupation

Table 3.2 illustrates the distribution of employed children across occupations (at one-digit and three-digit levels).²¹ It should be noted that the ISCO-88 classification used to construct the table differentiates between skilled agricultural workers and individuals in elementary occupations employed as agricultural workers; accordingly, 50.3 percent of working children are classified as skilled agricultural workers and 7.1 percent as elementary agricultural workers. Among the skilled group, 65 percent are “market-oriented animal producers”, and 31 percent are “market gardeners and crop growers”. It is likely that market-orientation is instrumental in classifying children as either skilled or unskilled agricultural workers, whereas given their age and the nature of agricultural production, it is also likely that the two groups do not differ substantially from one another. When both groups of children are taken together, 57.4 percent of working children are found to be agricultural workers, which is consistent with the earlier finding that 56.1 percent of children are engaged in agricultural activities. Another important occupational category is elementary workers outside of agriculture, which encompasses 30 percent of all working children. While the overwhelming majority (93%) of this group are classified as “messengers, porters,

²¹ Percentages are given in terms of working children referred to in the column (all, boys, or girls). For each column, the total number of employed children is equal to the total of the absolute figures for the main categories in that column, whereas the absolute figures in the sub-categories (italics) are reflected in the absolute figure for the relevant main category.

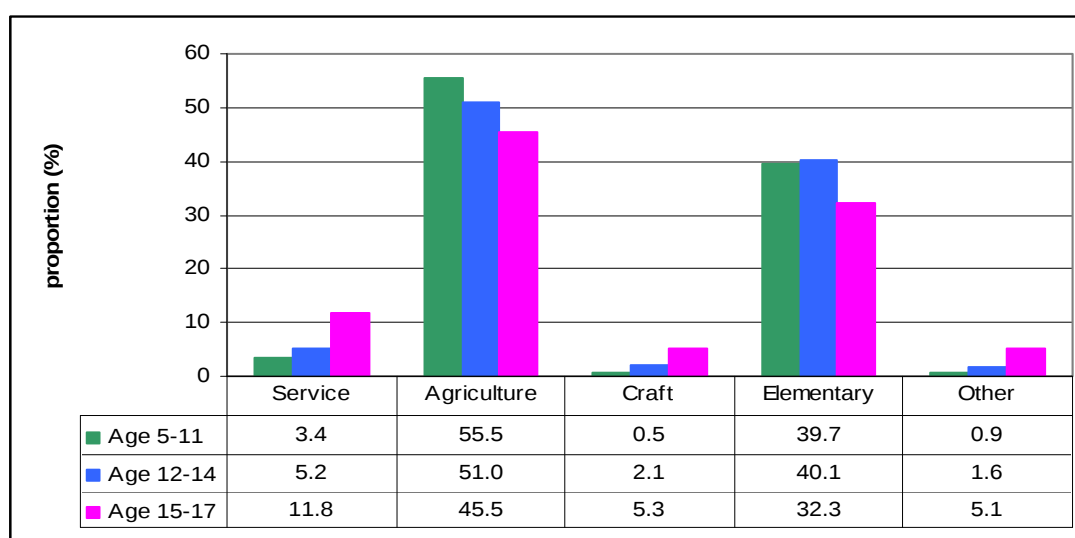
doorkeepers and related workers”, a more detailed analysis reveals this group of children to be engaged mainly in fetching water and firewood for their own and other households. Service and sales workers constitute an additional 7.2 percent of working children, and a small proportion of children (2.8%) are craft workers.

Table 3.2. Distribution of employed children by occupation and gender

Occupation (ISCO-88)	All	Boys	Girls
Service and sales workers	116,000 7.2%	108,000 12.2%	8,000 1.1%
<i>Shop sales persons and demonstrators – 522</i>	96,000 6.0%	89,000 10.1%	7,000 1.0%
Agricultural workers	811,000 50.3%	479,000 54.3%	332,000 45.4%
<i>Market gardeners and crop growers- 611</i>	250,000 15.5%	200,000 22.6%	50,000 6.8%
<i>Market-oriented animal producers and related w-612</i>	527,000 32.7%	268,000 30.4%	259,000 35.4%
Craft and related trades workers	46,000 2.8%	40,000 4.5%	6,000 0.8%
Elementary occupations	598,000 37.1%	219,000 24.8%	379,000 51.8%
<i>Messengers, porters, doorkeepers, and related w. – 915</i>	452,000 28.0%	93,000 10.5%	359,000 49.1%
<i>Agricultural, fishery and related labourers – 921</i>	114,000 7.1%	102,000 11.6%	12,000 1.7%
Others	43,000 2.7%	36,000 4.2%	6,000 0.8%
Employed children	1,614,000 100%	882,000 100%	732,000 100%

Occupations differ for boys and girls. Almost half of girls are engaged in carrying water and firewood (and are classified as “messengers, porters, doorkeepers, and related workers”); another 47.1 percent are agricultural workers; and the remaining 2 percent are either service and sales or craft workers. In contrast, only 10.5 percent of boys work as “porters” carrying water and firewood; the majority (65.9%) are agricultural workers; and another significant proportion (12.2%) are service and sales workers. With regard to agricultural workers, a larger proportion of boys than girls are market gardeners and crop growers or elementary agricultural workers, whereas a larger proportion of girls than boys work as market-oriented animal producers.

Figure 3.2. Distribution of employed children by occupation and age



The occupations held by children do not differ greatly by age (Figure 3.2). The majority of both younger and older children are agricultural workers, with only a 10-percentage-point difference between the proportions of children in the oldest and youngest age groups employed as agricultural workers, and when only the elementary workers group is taken into consideration, the difference between the two groups is even smaller (7.4 percentage points). Some interesting differences do emerge, however, when the broad classifications are examined in more detail. For instance, in comparison to older children, a larger proportion of younger children aged 5-11 (46.4%) work as “animal producers”, compared to older children aged 12-14 (32.8 %) and 15-17 (22%). In contrast, as children get older, a larger proportion of them engage in crop production: while 7.2 percent of 5-11-year-olds are “market-oriented crop producers”, this rate is 15.7 percent among 12-14-year-olds and 21.6 percent among 15-17-year-olds. Fetching water and firewood are activities more commonly performed by younger children than older children: 32.9 percent of 5-11-year-olds and 30.3 percent of 12-14-years-olds are engaged in this activity, compared to 22.2 percent of 15-17-year-olds. In contrast, a larger proportion of older children works as either service and sales or craft workers (Figure 3.2).

With regard to occupation, in general, age is less of a determinant than sex. However, girls and younger children are more likely to engage in fetching water and firewood or tending animals as compared to boys and older children.

3.3. Place of work

The majority of working children (61.4%) are employed on a farm or in a garden/field. This finding is consistent with the earlier finding that the majority of working children (57.4%) are agricultural workers. However, the workplaces of over one-fifth of working children could not be classified within a classical listing. Of these, the majority are children who fetch water and firewood for their own and other households. Water is scarce in Yemen, with many households lacking tap water. In fact, households of 40.7 percent of all children are required to obtain and transport drinking water directly from its source. This

problem is especially acute in rural areas, where households of 53.4 of children need water to be fetched (as compared to households of only 3.2 percent of children in urban areas). Wells are often used to supply households without tap water; however, the water source for households of one-fifth of rural children is a stream or spring, which may mean a long journey to obtain water for the household. In addition to water, children are often sent to collect firewood, which is used as a source of energy for cooking and heating, respectively, in the households of 55.2 percent and 23.5 percent of rural children.

Other workplaces of children include their own dwelling or that of their employers (6.8%) and shops/workshops (4.8%). Furthermore, 3.6 percent of working children work as hawkers in the streets.

The workplaces of children differ somewhat between boys and girls. While the majority of both work on a farm or in a garden/field, this proportion is higher among boys (66.5%) than girls (55.3%) (Table 3.3). In contrast, a larger proportion (30.4%) of girls' workplaces are unclassified (listed as "other" in Table 3.3) as compared to boys (12.5%). As noted above, these children primarily work outdoors carrying water and firewood to their own and other households. A larger proportion of working girls (11.5%) than boys (2.9%) are also found to work within the premises of their own dwelling or that of their employer, whereas a larger proportion of boys than of girls (5.2% vs. 1.8%) work on the streets.

Table 3.3. Distribution of employed children by place of work

Place of work	All	Boys	Girls
Formal workplace	19,000 1.2%	17,000 1.9%	2,000 0.3%
Shop/Workshop	77,000 4.8%	73,000 8.3%	4,000 0.6%
Dwelling	109,000 6.8%	25,000 2.9%	84,000 11.5%
Street	59,000 3.6%	46,000 5.2%	13,000 1.8%
Construction	24,000 1.5%	23,000 2.6%	1,000 0.2%
Farm/garden/field	991,000 61.4%	586,000 66.5%	405,000 55.3%
Other	333,000 20.6%	110,000 12.5%	223,000 30.4%
Employed children	1,614,000 100%	882,000 100%	732,000 100%

Figure 3.3. Distribution of employed children by place of work and age



When the workplaces of children are analyzed by age, a larger proportion of younger than older children are found to work on a farm/garden/field, whereas larger proportions of older than younger children work in a shop/workshop, formal workplace, or construction site or on the streets. The proportion of children whose workplaces are unclassified (listed as “other” in Figure 3.3) is slightly higher among younger than older children.

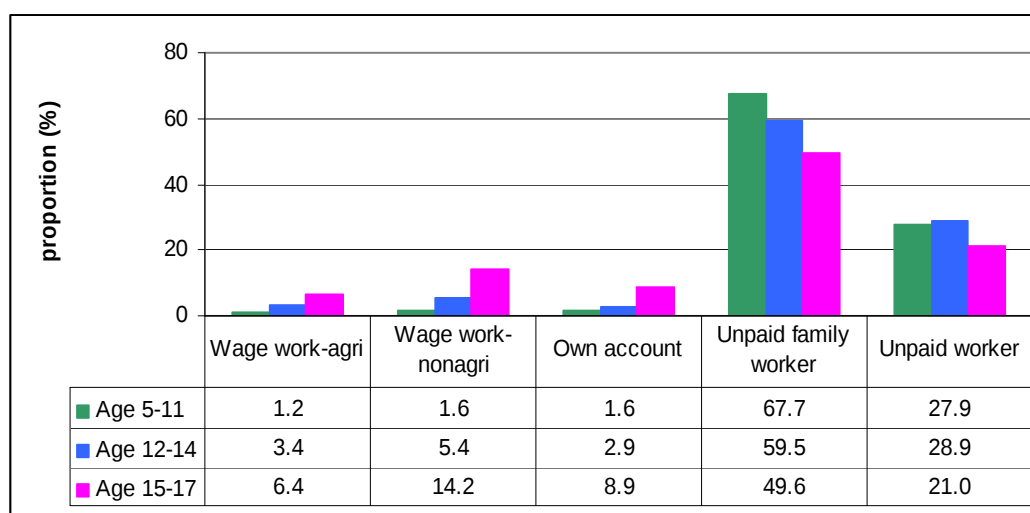
3.4. Status in employment

The majority of working children (58.2%) are unpaid family workers (Table 3.4), and another quarter is classified as “unpaid workers”. This latter group consists mainly of children who fetch water and firewood for other households (44.7%) or who tend other household’s livestock (36.3%). Even though these children may not receive payment in return for their services, the work performed is likely to be reciprocated by another child/household at a later date. The proportion of children who work for a wage is also high, at an estimated 11.5 percent, and a non-negligible proportion (4.8%) of children also work on their own account.

A larger proportion of girls than boys work without pay. Among girls, 63.4 percent of working girls are unpaid family workers and 33.4 percent are unpaid workers. The corresponding figures for boys are 53.8 percent and 19.1 percent. In contrast, 19.8 percent of working boys as compared to 1.4 percent of working girls are wage workers, primarily outside of agriculture. The proportion of working boys who work on their own account is higher than that of girls (7.3% vs. 1.7%).

Table 3.4. Distribution of employed boys and girls by status in employment (%)

Status in employment	All	Boys	Girls
Wage worker in agriculture	62,000 3.9%	58,000 6.6%	5,000 0.6%
Wage worker outside agriculture	123,000 7.6%	116,000 13.2%	6,000 0.8%
Own-account worker	77,000 4.8%	64,000 7.3%	12,000 1.7%
Unpaid family worker	939,000 58.2%	475,000 53.8%	464,000 63.4%
Unpaid worker	413,000 25.6%	169,000 19.1%	245,000 33.4%
Employed children (total)	1,614,000 100%	882,000 100%	732,000 100%

Figure 3.4. Distribution of employed children by status in employment and age

Unpaid family work tends to decrease as children grow older. While 67.7 percent of 5-11-year-old working children are unpaid family workers, this proportion decreases to 59.5 percent among 12-14-year-olds and further to 49.6 percent among 15-17-year-olds. Unpaid work outside of the family also tends to decrease, but not to the extent observed with unpaid work within the family. In contrast, wage work and self-employment increases with age: among working children aged 15-17, 20.6 percent are in wage work and 8.9 percent work on their own account. The continuing high rate of unpaid work outside of the household even among older children aged 15-17 points to the existence of non-market economies and informal exchanges between households.

3.5. Earnings and benefits²²

Information on monthly earnings of working children is available only for own-account workers and wage earners, who together constitute 16.3 percent of all working children. Furthermore, the information on earnings relates only to cash income from the main job, which is estimated to be 16,954 Yemeni Rials.²³ To put this figure in perspective, it must be viewed against the monthly cash earnings of adult workers (ages 18-64), which amount to 38,091 YR for wage earners and own-account workers. When only adult wage earners are considered, average monthly earnings decrease to 35,364 YR per month, and when only adults with less than a secondary education are taken into account, this figure decreases further to 29,453. Hence, children's earnings may be estimated to amount to between 45 percent to 58 percent of adult earnings.

Only a small proportion (11.6%) of child wage earners have written contracts,²⁴ with the remainder working on the basis of an oral agreement. Among wage earners, 42.5 percent of children receive non-wage benefits as well, mainly in the form of meals (67.6%), free or subsidized accommodations (19.8%), rest days (19.6%) and clothing (11.5%).

3.6. Child labour

Child labourers comprise children performing hazardous work as well as other children who, due to their age or working hours, are considered to be facing various risks to their physical, social, psychological or educational development because of their employment (see Section 1.3 on definitions). An estimated 1,309,000 children – 17.0 percent of all children aged 5-17 – are child labourers. They constitute 81.8 percent of working children.

Table 3.5. Distribution of child labourers by types of risks faced (%)

	All		Boys		Girls	
Child Labourers (a+b+c)	1,309,000		668,000		640,000	
a) Children in hazardous work	663,000 50.7%	100%	264,000 39.5%	100%	399,000 62.3%	100%
<i>In hazardous economic activity</i>	29,000 2.2%	4.4%	28,000 4.3%	10.8%	1,000 0.1%	0.2%
<i>In hazardous occupation</i>	634,000 48.4%	95.6%	236,000 35.3%	89.2%	398,000 62.2%	99.8%
b) Working children ages 5-13 years	480,000 36.6%	100%	279,000 41.8%	100%	200,000 31.3%	100%
c) Ages 14-17 working more than 30 hrs/week	166,000 12.7%	100%	125,000 18.7%	100%	41,000 6.4%	100%

²² The analyses in this section are not disaggregated by sex or age due to the small number of observations.

²³ Standard deviation is 11,375 YR.

²⁴ Parents of almost one-quarter of wage-earning children did not know if they had a written work contract; these children were excluded in calculating the estimate found in the text (11.6%). Considering that parents would be more likely to know their child's work arrangement if a written contract existed, this figure is probably an overestimate.

Table 3.5 details the risks that result in working children who are classified as child labourers, in line with the definition given in Section 1.3. The table is constructed by ordering risks (as they appear in the table) so that child labourers are grouped into four mutually exclusive groups. For instance, children working in mining and construction are categorized as involved in hazardous economic activity, regardless of whether or not they work an excessive number of hours – another type of risk faced by working children. It may be understood from this procedure that eliminating one type of risk does not necessarily mean that the prevalence of child labour will decrease, although it does imply a reduction in the severity of the problem.

According to the above sequential classification, 50.7 percent of child labourers are engaged in hazardous work; children too young to work for even one hour per week constitute 36.6 percent of child labourers; and the remainder (12.7%) are children who work excessive hours for their age. When children in hazardous work are examined in detail, the overwhelming majority (95.6%) are found to be employed in hazardous occupations and the remainder in hazardous economic activities (i.e. mining and construction). The ordering of risks has an intrinsic affect on the size of each risk group; for example, if younger children are engaged in hazardous occupations, they are classified as such, rather than as “under-age” child labourers. Regardless, it is safe to assert that employment in a hazardous occupation is one of the main reasons why a child may be classified as child labour.

Boys constitute 51.1 percent of child labourers.²⁵ In comparison to the gender composition of working children (boys account for 54.7% of this group), the greater balance observed in the gender composition of child labourers indicates that a larger proportion of girls are at risk of child labour. Indeed, while 75.7 percent of working boys are child labourers, the corresponding figure among girls is 87.5 percent. The risks faced by child labourers vary considerably between boys and girls (Table 3.5). While 39.5 percent of boy child labourers are in hazardous work, the corresponding rate among females is 62.2 percent. Among girls found in hazardous work, the vast majority are in hazardous occupations, with very few girls found in hazardous economic activities such as construction and mining. Moreover, primarily as a result of the larger proportion of girls classified under the category “hazardous work”, the proportions of girls classified as child labourers due to “under-age employment” and “excessive hours of work” are smaller in comparison to boys.

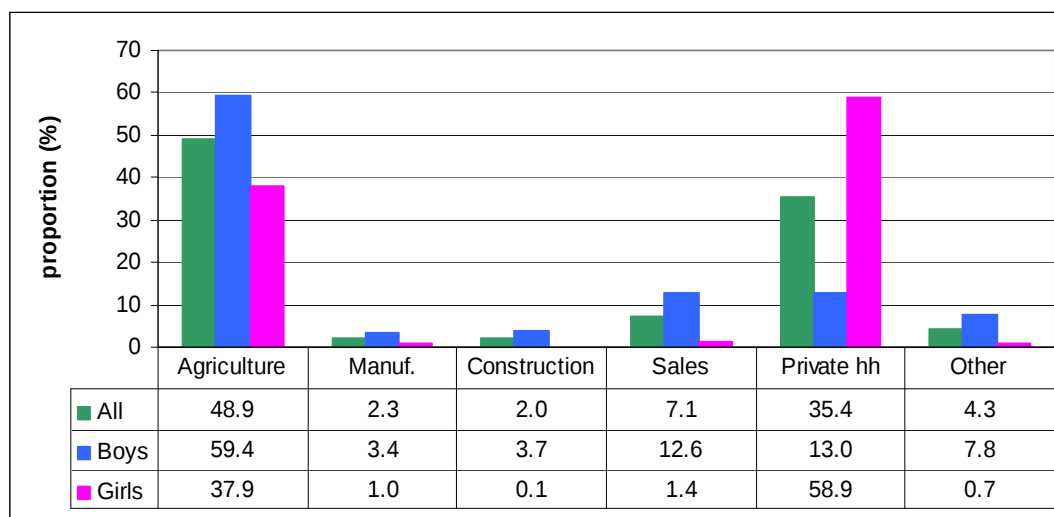
3.6.1. Type of economic activity held by child labourers

The overwhelming majority of child labourers are either employed in agriculture (48.9%) or in private households (35.4%) (Figure 3.5), with an additional 7.1 percent in wholesale and retail trade. Although the distribution of child labourers across economic activities is similar to the distribution obtained for working children (see Table 3.1), certain differences exist. For instance, the proportion of child labourers employed in agriculture is smaller by 7.2 percentage points than the proportion of working children in this activity. In contrast, a larger proportion of child labourers as compared to working children in general (a difference of 6.4 percentage points) are employed in private households. These findings indicate that when compared to private households, agricultural activities offer a safer

²⁵ Because the definition of child labour entails distinctions between children of different ages, a separate analysis of the distribution of child labour by age is not provided.

working environment to children, with the result that fewer working children in agriculture are categorized as child labourers. Other sectors with higher shares among child labourers than working children include manufacturing and construction.

Figure 3.5. Distribution of child labourers by economic activity



The proportion of female child labourers in agricultural activities is smaller than that of males, and the gender gap in this sector is similar between child labourers and working children. The proportions of boy and girl child labourers employed in private households, on the other hand, are higher than the proportions estimated for working children overall. Moreover, the high gender gap already observed among children working in private households is even higher among those considered child labour due to a slightly higher rate of girls as compared to boys involved in child labour in this sector. Wholesale and retail trade is another area of economic activity where a significant gender gap is observed, although in comparison to working children, smaller proportions of both boy and girl child labourers are in this economic activity, indicating lower risks for both groups of children in this sector.

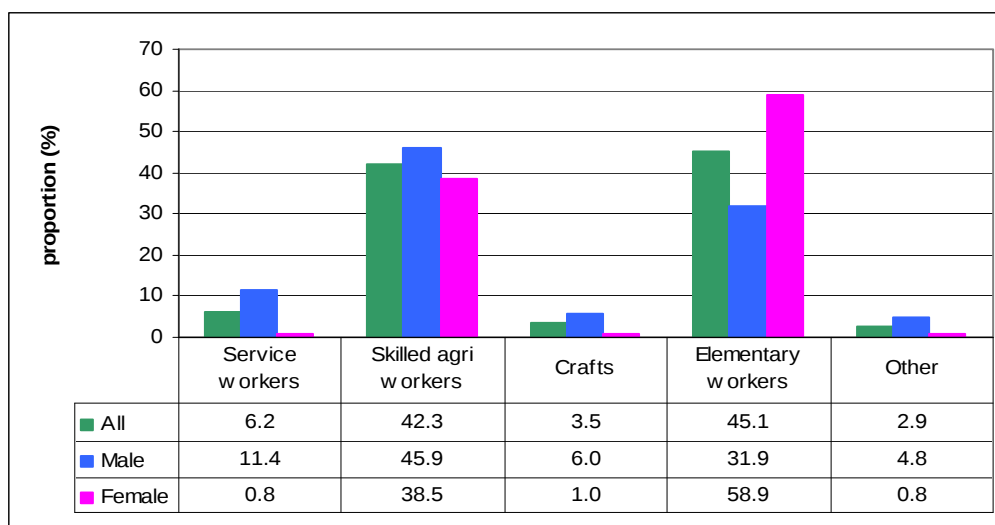
3.6.2. Occupations held by child labourers

The largest proportion of child labourers (45.1%) are elementary workers, followed by skilled agricultural workers (42.3%) and service and sales workers (6.2%). When compared to the occupational distribution of working children overall, the occupational distribution of child workers includes more elementary workers and fewer skilled agricultural workers. This difference is due mainly to the national definition of child labour: the most common elementary occupation held by children – “porters of water and firewood” (ISCO-88 code 915) – is recognized as hazardous work, whereas the two most common skilled agricultural occupations – crop-growers (ISCO-88 code 611) and animal producers (ISCO-88 code 612) – are not.

As discussed earlier, carrying water and firewood is primarily a female activity, and because this occupation is classified as hazardous, girls performing this activity are classified as child labourers. As a result, a much larger proportion of girl child labourers (58.9%) are

elementary workers as compared to boys (31.9%). In contrast, a larger proportion of boy child labourers (45.9%) are skilled agricultural workers as compared to girls (38.5%). Notwithstanding this gender gap, it is also the case that skilled agricultural workers account for smaller proportions of both boy and girl child labourers than of working children in general for the reason given above. Sales and service workers are also underrepresented among child labourers, implying that these occupations pose fewer risks to children than other occupations. In contrast, craft workers are slightly over-represented among child labourers.

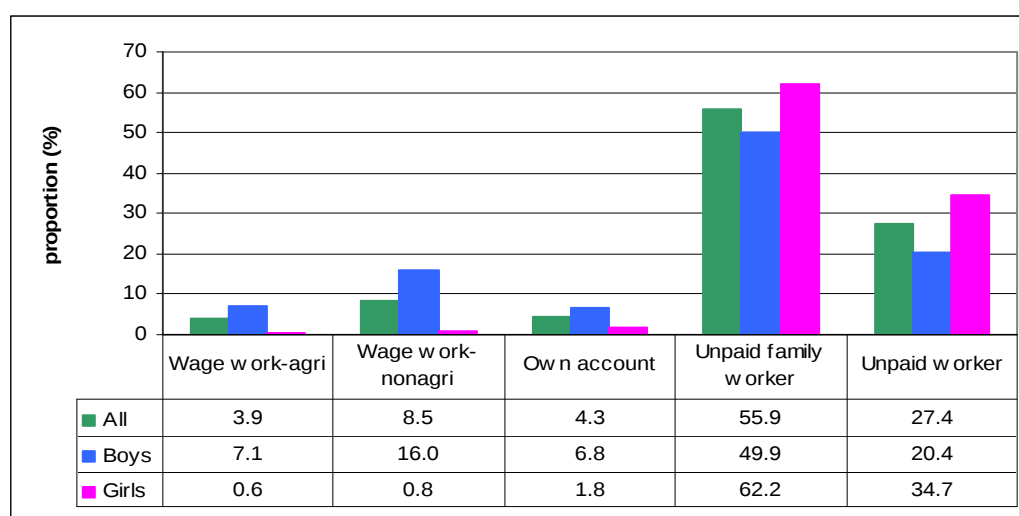
Figure 3.6.a. Distribution of child labourers by occupation



3.6.3. Status in employment of child labourers

A significant proportion of child labourers are classified as unpaid family workers (55.9%), while another significant proportion are classified as unpaid workers (27.4%), i.e. children who carry out activities for other households on an informal basis without being paid. Considered together, these two groups constitute 83.3 percent of all child labourers – a proportion that is almost identical to that of working children (83.8%). The proportion of child labourers who work on their own account (4.3%) is also similar to the proportion of working children employed on their own account (4.8%), whereas a slightly higher proportion of child labourers (12.4%) than working children (11.5%) are wage workers. In general, in terms of employment status, the differences between working children and child labourers are relatively small.

Figure 3.6.b. Distribution of child labourers by status in employment



A larger proportion of girl child labourers (62.2%) than boy child labourers (49.9%) are classified as “unpaid family workers”; similarly, a larger proportion of girl child labourers (34.7%) than boy child labourers (20.4%) are classified as “unpaid workers”. Hence, the vast majority (96.9%) of girl child labourers as well as a majority (70.3%) of boy child labourers work without pay. In contrast, a larger proportion of boy child labourers than girl child labourers work as wage workers (23.1% vs. 7.1%) or as own-account workers (6.8% vs. 1.8%) (Figure 3.6.b.). The employment status of girl child labourers is very similar to that of working girls in general, whereas the proportion of boy child labourers engaged in wage work (23.1%) is larger than that of working boys in general (19.8%) (see Table 3.7). These findings suggest that boys who are gainfully employed face higher risks than those who work without pay.

4. Multivariate analysis of the schooling and employment of children

This section of the report examines the correlates of child employment, child labour and school attendance in a multivariate framework. Since the time-use of children will differ depending on whether they live with their parents or have established their own households, children who are the head of their own households as well as children who are married, divorced or widowed are excluded from analysis. (This reduces the number of children aged 5-17 in the sample from 23,535 to 23,267.)

The characteristics of children, their households and their communities determine their employment and schooling outcomes. (For a recent review of the literature on child labour, see Edmonds, 2008.) Individual-level characteristics of children include their age, sex and whether or not their parents are present in the household. Older children are under a higher risk of employment because of the higher opportunity cost of their schooling in the form of forgone wages and/or home production. For the same reason, the risk of dropping out of school increases as children grow older. Due to the traditional division of labour along gender lines, which results in a tendency for boys to engage in market work and girls in unpaid household services, the likelihood that boys will work is greater than that of girls. In conservative societies like Yemen, female seclusion will strengthen the traditional division of labour, especially beyond puberty. Due in part to their greater involvement in the labour market as adults, parents are likely to invest more in boys' schooling as compared to girls'. The absence of one or both parents may also adversely affect children's schooling for reasons ranging from a lack of income to pay for school expenses to the unavailability of support for school work at home. Absence of parents may increase or decrease the child's risk of employment, since, on the one hand, a child may have to work as a substitute for an absent parent, whereas on the other, a child may have difficulty finding work without parents, especially without a father.

Household-level characteristics include the age and education of the household head, the size and composition of the household, whether the household is headed by a man or woman and the level of household income. These characteristics reflect the earning capacity of the household against its needs. For instance, children living in a household headed by a younger and less educated individual will have a higher likelihood of employment and a lower likelihood of school attendance. Educated parents may also value education more than others and be more aware of the risks associated with employment at an early age. Children living in poorer households (current household income status is measured by an Asset Index of various household possessions)²⁶, are expected to have a higher likelihood of employment and a lower likelihood of school attendance.

²⁶ The Asset Index is constructed using principal component analysis (See Filmer and Pritchett, 2001) and includes ownership of a car, motorbike, bicycle and a range of consumer durables that include a television, refrigerator, recorder, washing machine, oven, mixer, computer, sewing machine, satellite, telephone, cell phone, air conditioner, fan, iron, heater and vacuum cleaner.

Community-level characteristics include the availability of piped water and the community practice of using sources of energy other than wood/dung for cooking.²⁷ In addition to these two characteristics, a variable representing the household's region of residence (i.e. governorate) is included in the models to account for variations in local labour markets and schooling facilities.

Due to the binary nature of the dependent variables employment, child labour and school attendance (children either *are* or *are not* employed, working as child labour, attending school), probit regressions are used to estimate the probability of children's involvement in these activities. Moreover, given that the considerable differences in the time-use patterns of boys and girls described above imply that factors determining time allocation may differ between the two groups, separate models are run for boys and girls.

4.1. Correlates of child employment

The results of probit regressions for child employment are shown in Table 4.1. (Tables 4.1 through 4.3 include estimated coefficients as well as marginal effects and significance levels of the explanatory variables).²⁸ As the table shows, the predicted risk of employment is higher among older children. Similarly, Figure 4.1 shows that the probability of employment increases with the age of the child (though at a decreasing rate) and is highest (42.6%) for children aged 17. Absence of the child's mother increases the risk that a child will be employed by an additional 5.3 percentage points. This is a sizeable change, given that the average employment rate of children is 20.8 percent²⁹ and the predicted rate (at mean values of explanatory variables) is 13.3 percent. Lower levels of schooling of the household head represent another risk factor for child employment, with a child residing in a household where the head (often the child's father) does not have any schooling at a risk of employment 3.6 percentage points higher than a child in which the head of the household has above a secondary education. Given that 62.6 percent of children live in households where the head does not have any education, whereas only 10.7 live in households where the head has above a secondary education, this increase in the risk of employment can be considered moderate. Furthermore, statistical tests indicate that the marginal effect of having a household head with less than primary, primary or secondary schooling does not differ from that of having a head without any schooling; in other words, all these schooling levels increase the risk of a child's employment by about the same rate when compared to having a head with above a secondary education. A larger number of household members helps to reduce the risk of a child's employment; however, the risk of employment increases if the child's household has larger numbers of 0-4-year-olds (regardless of sex), conditional upon household size.

²⁷ Given that the CLS not directly collect data on these two community-level characteristics, the variables associated with them are constructed using averages of household-level information for each of the 822 enumeration areas. The indicator variable for piped water network is a continuous variable that takes values from 0 to 1, with a value of 0 indicating that piped water is not available and a value of 1 indicating full availability. Similarly, the indicator variable for energy source used for cooking ranges from 0 to 1, with a value of 1 showing that rather than wood/dung, electricity, gasoline, etc. constitute the main energy source for cooking.

²⁸ Given that the same household may contain more than one child, standard errors of coefficients are corrected for clustering.

²⁹ This rate is slightly lower than the employment rate reported in Sections 2 and 3. The difference stems from the fact that the sample used in this section is slightly different due to reasons explained in the introduction of this section.

Children living in poorer households stand at a higher risk of employment. While a child whose household is in the bottom 20 percent of the income distribution (as measured by the Asset Index) has a predicted employment rate of 16.1 percent, the corresponding rate for a child whose household is in the top 20 percent of the income distribution is 9.2 percent. A meaningful drop (in a statistical sense) in child employment does not occur until the household reaches the top 40 percent of the income distribution. In other words, going from the bottom to the third quintile results in a 2.4 percentage point drop in child employment, but this decline is not statistically significant. Interestingly, the ownership of land, which is another indicator of income, increases the child's risk of employment. This can be explained by the fact that unlike assets included in the Asset Index (e.g. automobiles and consumer durables), land generates employment opportunities for children. Children in households that own land are at a 6.4 percentage point greater risk of employment when compared to their counterparts in households that do not own land. This increase offsets the drop in child employment due to higher income, so that a child whose household is in the fourth income quintile and who also owns land has a predicted employment rate of 16.2 percent as compared to the predicted rate of 12.7 percent for a child from a landless household at the bottom income quintile. However, even with land ownership, the predicted employment rate of children from the top quintile (11.9%) is lower than children from other quintiles.

Another risk factor that increases children's employment is the unavailability of piped water and the use of wood, dung and similar sources for cooking energy. Holding all other explanatory variables at mean values, a child living in a community without piped water and where there is exclusive use of wood, dung and similar energy sources has a predicted employment rate of 21.0 percent. When piped water becomes available, this rate drops to 15.8 percent, whereas the use of energy sources other than wood and dung reduces the predicted employment rate to 11.7 percent. In communities where households are both connected to piped water and use energy sources other than wood and dung, the predicted employment rate reaches a low of 8.3 percent. Rural residence itself is a risk factor: For children living in urban areas, the risk of employment is 5.2 percentage points lower than for their rural counterparts.

As discussed above, a combination of factors increases a child's risk of employment to above 13.3 percent, the rate predicted at the mean values of explanatory variables. For instance, a child who lives in an urban area where water is obtained through a network and where wood, dung or similar energy sources are not used, in a household in which the household head has above a secondary education and the household's income puts it in the top income quintile has a predicted employment rate of 4.4 percent. In contrast, a child living in a rural community that lacks piped water and relies on wood, dung and similar sources of energy, in a household whose head has no schooling and in which the household income level puts it in the bottom quintile has a predicted employment rate of 28.1 percent. Hence, measures that aim to reduce child employment need to be multifaceted, addressing risks at household as well as community levels.

Table 4.1. Likelihood of child employment based on probit equations

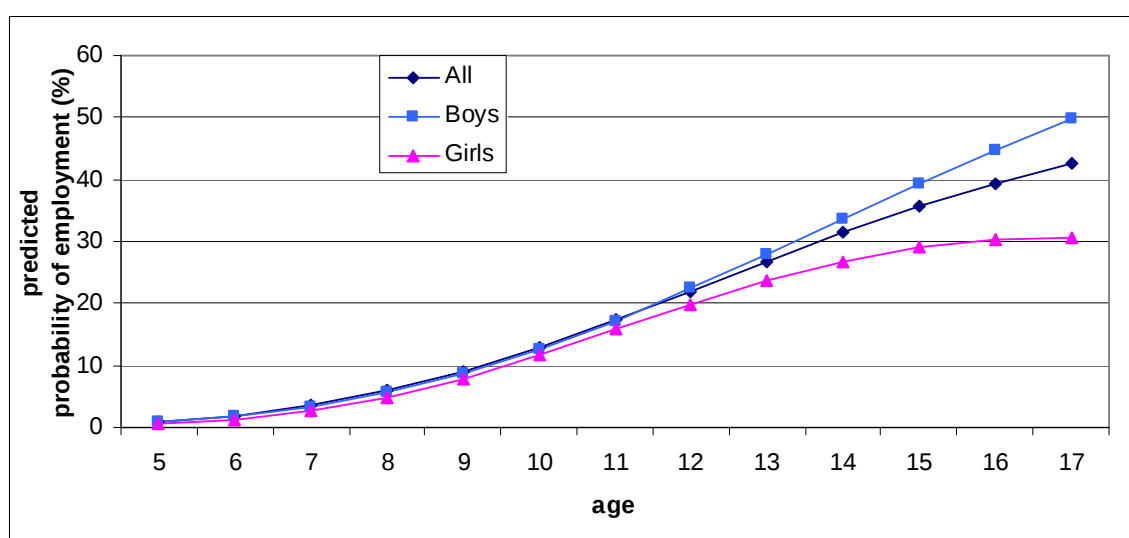
	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
Age	0.382***	0.082***	0.333***	0.076***	0.513***	0.092***
	[0.032]	[0.007]	[0.041]	[0.009]	[0.050]	[0.009]
Age squared (1/100)	-0.915***	-0.197***	-0.628***	-0.143***	-1.538***	-0.277***
	[0.137]	[0.029]	[0.172]	[0.039]	[0.213]	[0.038]
Female child	-0.026	-0.006				
	[0.033]	[0.007]				
Mother absent	0.220**	0.053**	0.337***	0.089***	0.106	0.02
	[0.094]	[0.025]	[0.109]	[0.033]	[0.142]	[0.029]
Father absent	0.073	0.016	0.113	0.027	-0.089	-0.015
	[0.090]	[0.021]	[0.110]	[0.028]	[0.118]	[0.019]
Head of household: age	0.002	0.000	-0.002	-0.001	0.006	0.001
	[0.003]	[0.001]	[0.003]	[0.001]	[0.004]	[0.001]
Head's education: No education	0.173**	0.036**	0.262***	0.058***	0.054	0.01
	[0.077]	[0.016]	[0.096]	[0.021]	[0.105]	[0.019]
Head's education: Less primary	0.224**	0.053**	0.260**	0.066**	0.185	0.037
	[0.097]	[0.025]	[0.121]	[0.034]	[0.138]	[0.030]
Head's education: Primary	0.191*	0.045*	0.204*	0.051*	0.265**	0.055**
	[0.104]	[0.026]	[0.123]	[0.033]	[0.133]	[0.031]
Head's education: Secondary	0.095	0.021	0.113	0.027	0.064	0.012
	[0.096]	[0.022]	[0.119]	[0.030]	[0.141]	[0.027]
Spouse of head: age	0.000	0.000	-0.002	0.000	0.004	0.001
	[0.004]	[0.001]	[0.004]	[0.001]	[0.005]	[0.001]
Spouse of head's education: No education	0.119	0.025	0.595**	0.108***	-0.171	-0.033
	[0.244]	[0.048]	[0.275]	[0.039]	[0.282]	[0.058]
Spouse of head's education: Less primary	0.000	0.000	0.436	0.121	-0.261	-0.04
	[0.279]	[0.060]	[0.310]	[0.101]	[0.361]	[0.046]
Spouse of head's education: Primary	0.058	0.013	0.626**	0.185**	-0.417	-0.058
	[0.269]	[0.061]	[0.300]	[0.107]	[0.372]	[0.038]
Spouse of head's education: Secondary	-0.233	-0.044	0.229	0.058	-0.561	-0.071
	[0.273]	[0.045]	[0.318]	[0.089]	[0.352]	[0.029]
Spouse absent	0.132	0.03	0.536	0.151	-0.028	-0.005
	[0.294]	[0.071]	[0.338]	[0.113]	[0.362]	[0.063]
Head female	-0.187	-0.036	-0.171	-0.036	-0.111	-0.019
	[0.145]	[0.025]	[0.179]	[0.034]	[0.192]	[0.030]
Household size	-0.050**	-0.011**	-0.036	-0.008	-0.074***	-0.013***
	[0.020]	[0.004]	[0.024]	[0.005]	[0.027]	[0.005]
No. 0-4-year-old boys	0.174***	0.037***	0.183***	0.042***	0.160***	0.029***
	[0.032]	[0.007]	[0.038]	[0.009]	[0.046]	[0.008]
No. 0-4-year-old girls	0.144***	0.031***	0.123***	0.028***	0.190***	0.034***
	[0.030]	[0.006]	[0.035]	[0.008]	[0.044]	[0.008]
No. 5-17-year-old boys	0.022	0.005	0.035	0.008	0.026	0.005
	[0.025]	[0.005]	[0.029]	[0.007]	[0.034]	[0.006]
No. 5-17-year-old girls	0.024	0.005	0.000	0.000	0.052	0.009

	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
	[0.026]	[0.006]	[0.030]	[0.007]	[0.035]	[0.006]
No. 18+ adult women	0.04	0.009	0.047	0.011	0.042	0.007
	[0.032]	[0.007]	[0.040]	[0.009]	[0.043]	[0.008]
Asset index – bottom 20%	0.337***	0.080***	0.271**	0.067**	0.423***	0.088***
	[0.092]	[0.024]	[0.109]	[0.029]	[0.130]	[0.031]
Asset index – second 20%	0.291***	0.069***	0.201*	0.049*	0.383***	0.080***
	[0.086]	[0.022]	[0.105]	[0.027]	[0.120]	[0.028]
Asset index - third 20%	0.236***	0.055***	0.205**	0.049**	0.261**	0.052**
	[0.078]	[0.019]	[0.092]	[0.023]	[0.110]	[0.023]
Asset index – fourth 20%	0.193***	0.044**	0.196**	0.047**	0.190*	0.037*
	[0.073]	[0.018]	[0.085]	[0.022]	[0.111]	[0.023]
Land	0.296***	0.064***	0.304***	0.069***	0.276***	0.050***
	[0.046]	[0.010]	[0.054]	[0.012]	[0.066]	[0.012]
Water availability in community (network connection)	-0.197***	-0.042***	-0.066	-0.015	-0.368***	-0.066***
	[0.061]	[0.013]	[0.074]	[0.017]	[0.088]	[0.016]
Energy source in community (non-wood sources)	-0.380***	-0.082***	-0.226**	-0.051**	-0.613***	-0.111***
	[0.091]	[0.019]	[0.114]	[0.026]	[0.124]	[0.022]
Rural	0.257***	0.052***	0.146*	0.032*	0.583***	0.088***
	[0.071]	[0.014]	[0.081]	[0.017]	[0.119]	[0.016]
Constant	-3.273***		-3.903***		-3.167***	
	[0.328]		[0.401]		[0.412]	
Observed probability	0.208		0.216		0.199	
Predicted probability at mean	0.133		0.145		0.104	
Wald chi ² (50)	1868.07		1090.50		1085.73	
Prob > chi ²	0.000		0.000		0.000	
Pseudo R ²	0.249		0.234		0.316	
Observations	23,223		12,532		10,691	

Notes: Robust standard errors are in brackets. Covers children aged 5-17. Reference categories for dummy variables include more than secondary schooling for household head's schooling, number of adult men 18 and older for household composition, richest 20% of households in wealth index. Regions are included in estimations. * significant at 10%; ** significant at 5%; *** significant at 1%.

Despite the fact that the results of regression analysis did not indicate any differences in the level of employment risk between girls and boys, separate regressions were run by sex to identify differences, if any, in the correlates of girls' and boys' employment. As seen in Table 4.1, columns 3-6, similarities as well as differences were found in the role of explanatory variables in determining boys' and girls' employment. For instance, both boys and girls have a higher risk of employment at older as compared to younger ages. In fact, Figure 4.1 shows the risk of employment for boys and girls to be similar until about age 11, after which girls' employment grows at a slower rate than boys'. As a result, by age 17, close to a 20-percentage-point gap has opened up between boys and girls.

Figure 4.1. Predicted employment rate by age and sex



Note: Based on results given in Table 4.1.

The absence of the mother of the child from the household affects only boys' employment probability, increasing it by 8.9 percentage points. The schooling of the household head and spouse are also found to have a greater effect on boys' schooling than girls' schooling. For instance, no difference is predicted in the employment probability of a girl whose household head has no schooling and a girl whose household head has above secondary schooling, but in the case of boys, no schooling on the part of the household head increases the predicted probability of employment by 5.8 percentage points over a boy whose household head has above secondary schooling. A higher, but not statistically significant, probability of employment is also observed among boys from households in which the head has no education, some education but less than primary school, or primary schooling as compared to higher schooling levels. In the case of girls, the only schooling level that affects girls' employment probability is primary education on the part of the household head, which increases the predicted likelihood of employment of girls by 5.5 percentage points above that of girls whose household heads have more than secondary schooling.

Household size affects girls' employment probability, reducing it by 1.3 percentage points for each additional member, whereas boys' employment is not affected by household size. However, increases in the number of children aged 0-4 increases both the employment probability of both girls and boys. Household income is another variable that affects both boys' and girls' employment: Coming from a household which is at the bottom 20 percent in terms of income increases the employment probability of boys by 6 percentage points and that of girls by 7 percentage points.³⁰ In the case of boys, however, the move from one income quintile to another does not change the probability of employment unless the move is to the top 20 percent, whereas girls' employment decreases if the move is from the

³⁰ The marginal effects listed in Table 4.1 are slightly different than those reported in the text due to a slightly different method of computation. In Table 4.1 the marginal effects of income variables are computed by setting all variables – including income variables – to their mean values and assigning a value of 1 and then 0 to the income variable in question. The figures in the text are computed by setting all income variables to zero except for the one in question.

bottom quintile to the third or higher quintile, or from the second to the fourth or higher quintile. In other words, the employment of girls seems to be more sensitive to income changes. Household ownership of land, on the other hand, affects the likelihood of both girls' and boys' employment, increasing it by 5-7 percentage points.

The availability of piped water affects girls' employment but not that of boys, whereas the community's reliance on wood, dung and similar sources of energy increases the probability of employment for all children, although more so for girls than for boys. These results are consistent with the findings in Section 3 that showed fetching water and firewood to be performed largely by girls. A girl living in a community where piped water is not available and where wood, dung and similar sources are commonly used for energy has a predicted employment rate of 22.9 percent, as compared to a 4.9 percent estimated rate for a girl whose community has a water network and uses resources other than wood and dung for energy. The corresponding rates for boys are 18.2 and 11.6 percent, respectively. Rural employment also increases both boys' and girls' employment; however, the effect is larger for girls than for boys (8.8 percentage points vs. 3.2 percentage points, respectively).

4.2. Correlates of child labour

Considering that over 80 percent of employed children are classified as child labourers, the correlates of child employment and child labour are likely to be similar. Indeed, the results of probit regressions on child labour (Table 4.2) are, in general, in agreement with those on child employment (Table 4.1). For this reason, this report provides only a brief summary, highlighting the differences between the two groups.

Age is a strong correlate of child labour. As Figure 4.2 shows, the probability of child labour increases with age, peaking at 16 years for boys and 14 years for girls. That the risk of child labour does not peak at 17 years, as is the case for child employment, has to do with the definition of child labour: As discussed in Section 2, all working children younger than 14 are classified as child labourers if they worked for at least 1 hour during the reference week, whereas older working children are classified as child labourers only if they worked for more than 30 hours during the reference week or were engaged in hazardous work. Girls are found to be at a slightly higher risk of child labour than boys due to the fact that girls constitute larger proportions of both younger working children aged 5-11 and older children in hazardous work (see Sections 2 and 3).

Table 4.2. Likelihood of child labour based on probit equations

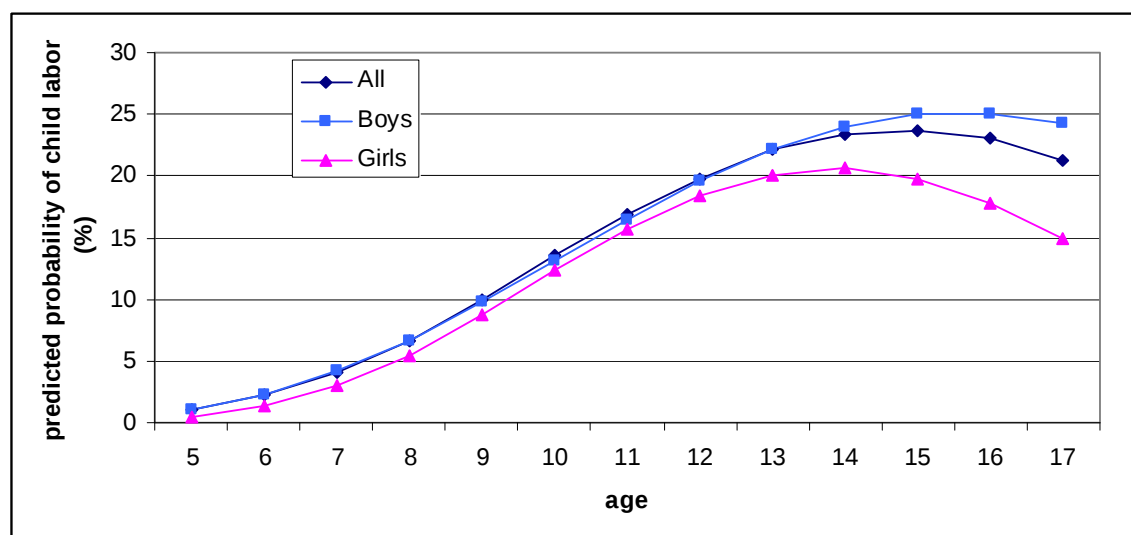
	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
Age	0.499***	0.096***	0.449***	0.089***	0.625***	0.102***
	[0.033]	[0.006]	[0.041]	[0.008]	[0.051]	[0.008]
Age squared (1/100)	-1.684***	-0.324***	-1.439***	-0.286***	-2.253***	-0.366***
	[0.144]	[0.028]	[0.177]	[0.035]	[0.221]	[0.036]
Female child	0.061*	0.012*				
	[0.033]	[0.006]				
Mother absent	0.190*	0.04*	0.260*	0.059*	0.124	0.022
	[0.110]	[0.026]	[0.134]	[0.034]	[0.135]	[0.025]

	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
Father absent	0.131	0.027	0.182*	0.04*	-0.02	-0.003
	[0.084]	[0.018]	[0.105]	[0.025]	[0.112]	[0.018]
Head of household: age	0.001	0.000	-0.002	0.000	0.004	0.001
	[0.003]	[0.001]	[0.004]	[0.001]	[0.004]	[0.001]
Head's education: No education	0.161**	0.030**	0.288***	0.055***	-0.001	0.000
	[0.073]	[0.014]	[0.091]	[0.017]	[0.102]	[0.017]
Head's education: Less primary	0.204**	0.044**	0.268**	0.061**	0.125	0.022
	[0.095]	[0.022]	[0.116]	[0.030]	[0.137]	[0.026]
Head's education: Primary	0.142	0.029	0.215*	0.047*	0.139	0.024
	[0.101]	[0.022]	[0.120]	[0.029]	[0.133]	[0.025]
Head's education: Secondary	0.104	0.021	0.162	0.035	0.025	0.004
	[0.092]	[0.019]	[0.114]	[0.026]	[0.136]	[0.023]
Spouse of head: age	0.002	0.000	0.001	0.000	0.005	0.001
	[0.004]	[0.001]	[0.004]	[0.001]	[0.005]	[0.001]
Spouse of head's education: No education	0.152	0.028	0.462*	0.076*	-0.047	-0.008
	[0.213]	[0.036]	[0.265]	[0.035]	[0.242]	[0.041]
Spouse of head's education: Less primary	0.03	0.006	0.327	0.077	-0.164	-0.024
	[0.251]	[0.050]	[0.298]	[0.082]	[0.319]	[0.042]
Spouse of head's education: Primary	0.024	0.005	0.446	0.111	-0.436	-0.053
	[0.239]	[0.047]	[0.289]	[0.086]	[0.346]	[0.030]
Spouse of head's education: Secondary	-0.225	-0.038	0.042	0.009	-0.428	-0.053
	[0.255]	[0.037]	[0.315]	[0.066]	[0.331]	[0.029]
Spouse absent	0.254	0.055	0.497	0.125	0.142	0.025
	[0.272]	[0.067]	[0.333]	[0.100]	[0.331]	[0.063]
Head female	-0.253*	-0.042*	-0.252	-0.044	-0.194	-0.028
	[0.144]	[0.020]	[0.181]	[0.027]	[0.190]	[0.024]
Household size	-0.049**	-0.010**	-0.032	-0.006	-0.076***	-0.012***
	[0.020]	[0.004]	[0.025]	[0.005]	[0.026]	[0.004]
No. 0-4-year-old boys	0.171***	0.033***	0.184***	0.037***	0.148***	0.024***
	[0.031]	[0.006]	[0.037]	[0.007]	[0.045]	[0.007]
No. 0-4-year-old girls	0.138***	0.027***	0.111***	0.022***	0.185***	0.030***
	[0.030]	[0.006]	[0.036]	[0.007]	[0.045]	[0.007]
No. 5-17-year-old boys	0.019	0.004	0.028	0.006	0.024	0.004
	[0.025]	[0.005]	[0.029]	[0.006]	[0.034]	[0.006]
No. 5-17-year-old girls	0.025	0.005	0.000	0.000	0.055	0.009
	[0.027]	[0.005]	[0.032]	[0.006]	[0.035]	[0.006]
No. 18+ adult women	0.015	0.003	0.008	0.002	0.035	0.006
	[0.032]	[0.006]	[0.040]	[0.008]	[0.043]	[0.007]
Asset index – bottom 20%	0.286***	0.061***	0.241**	0.052**	0.334***	0.062***
	[0.090]	[0.021]	[0.106]	[0.024]	[0.126]	[0.026]
Asset index – second 20%	0.225***	0.047***	0.14	0.029	0.293**	0.054**
	[0.084]	[0.019]	[0.103]	[0.023]	[0.115]	[0.024]
Asset index - third 20%	0.154**	0.031**	0.111	0.023	0.179*	0.031*
	[0.077]	[0.016]	[0.091]	[0.019]	[0.107]	[0.020]
Asset index – fourth 20%	0.121*	0.024*	0.126	0.026	0.100	0.017

	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
	[0.073]	[0.015]	[0.083]	[0.018]	[0.109]	[0.019]
Land	0.240***	0.046***	0.211***	0.042***	0.271***	0.044***
	[0.047]	[0.009]	[0.055]	[0.011]	[0.066]	[0.011]
Water availability in community (network connection)	-0.238***	-0.046***	-0.087	-0.017	-0.449***	-0.073***
	[0.061]	[0.012]	[0.074]	[0.015]	[0.088]	[0.014]
Energy source in community (non-wood sources)	-0.311***	-0.060***	-0.143	-0.028	-0.554***	-0.090***
	[0.091]	[0.017]	[0.114]	[0.023]	[0.124]	[0.020]
Rural	0.212***	0.038***	0.092	0.018	0.563***	0.077***
	[0.072]	[0.012]	[0.081]	[0.015]	[0.117]	[0.014]
Constant	-4.027***		-4.336***		-4.296***	
	[0.312]		[0.396]		[0.409]	
Observed probability	0.169		0.164		0.174	
Predicted probability at mean	0.114		0.119		0.902	
Wald chi ² (50)	1549.23		810.40		939.22	
Prob > chi ²	0.000		0.000		0.000	
Pseudo R ²	0.187		0.148		0.278	
Observations	23,223		12,532		10,691	

Notes: Robust standard errors are in brackets. Covers children ages 5-17. Reference categories for dummy variables include more than secondary schooling for household head's schooling, number of adult men 18 and above for household composition, richest 20% of households in wealth index. Regions are included in estimations. * significant at 10%; ** significant at 5%; *** significant at 1%.

Figure 4.2. Predicted employment rate by age and sex



Note: Based on results given in Table 4.2.

Absence of a child's mother and father increases the risk of child labour for boys but not for girls. Likewise, where significant, the schooling levels of the household head and the head's spouse affect boys but not girls. In comparison to the reference category of

“more than secondary schooling”, boys in households where the head has less than secondary schooling as well as boys in households where the head’s spouse has no education face higher risks of child labour. Similar to the findings for working children, household size reduces the probability of child labour for girls, whereas the presence of young children (0-4 years) increases the risk of child labour for both girls and boys.

Girls’ risk of child labour is more responsive to household income level than boys’: whereas the risk is higher for boys from households in the bottom income quintile, the risk is higher for girls in the bottom 60 percent of income distribution. However, ownership of land increases the risk of child labour equally for girls and boys (by about 4 percentage points).

The lack of piped water, the use of wood, dung and similar energy sources and residence in a rural area increase the child labour risk of girls, but not of boys. This is most likely due to the greater involvement of girls in carrying water and firewood.

4.3. Correlates of school attendance

This section explores the correlates of school attendance. As noted earlier, the school attendance of 5-year-olds is very low; therefore, this section considers children aged 6-17 years only. The results are given in Table 4.3.

Children’s predicted school attendance follows an inverted U-shaped pattern, increasing until 11 years and declining thereafter (Figure 4.3). This general pattern holds true for both girls and boys, although school attendance rates start to diverge before children reach their teens, and a sizeable gender schooling gap opens by age 17, when attendance rates for boys and girls reach 51.7 percent and 28.2 percent, respectively.

Table 4.3. Likelihood of school attendance based on probit equations

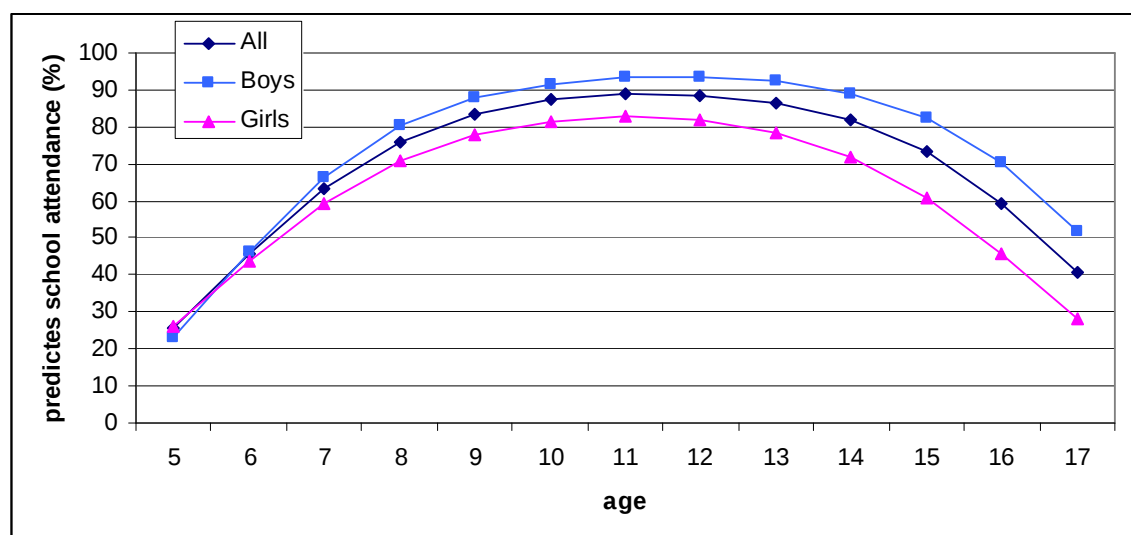
	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
Age	1.051***	0.326***	1.191***	0.305***	0.956***	0.341***
	[0.031]	[0.010]	[0.042]	[0.011]	[0.044]	[0.016]
Age squared (1/100)	-4.618***	-1.432***	-5.123***	-1.311***	-4.321***	-1.542***
	[0.133]	[0.042]	[0.181]	[0.048]	[0.193]	[0.069]
Female child	-0.539***	-0.168***				
	[0.032]	[0.010]				
Mother absent	-0.158*	-0.051*	-0.140	-0.038	-0.186	-0.069
	[0.091]	[0.031]	[0.128]	[0.037]	[0.119]	[0.045]
Father absent	-0.172**	-0.056**	-0.256**	-0.072**	-0.07	-0.025
	[0.077]	[0.026]	[0.112]	[0.034]	[0.104]	[0.038]
Head of household: age	0.000	0.000	-0.005	-0.001	0.005	0.002
	[0.002]	[0.001]	[0.003]	[0.001]	[0.003]	[0.001]
Head’s education: No education	-0.550***	-0.162***	-0.547***	-0.131***	-0.531***	-0.182***
	[0.064]	[0.018]	[0.090]	[0.020]	[0.086]	[0.028]
Head’s education: Less primary	-0.323***	-0.109***	-0.280**	-0.080**	-0.334***	-0.126***
	[0.082]	[0.030]	[0.111]	[0.035]	[0.109]	[0.042]
Head’s education: Primary	-0.255***	-0.085***	-0.078	-0.021	-0.374***	-0.141***

	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
	[0.076]	[0.027]	[0.114]	[0.031]	[0.100]	[0.039]
Head's education: Secondary	-0.158**	-0.051*	-0.042	-0.011	-0.216**	-0.080**
	[0.078]	[0.026]	[0.110]	[0.029]	[0.106]	[0.040]
Spouse of head: age	0.000	0.000	0.008**	0.002**	-0.008*	-0.003*
	[0.003]	[0.001]	[0.004]	[0.001]	[0.004]	[0.001]
Spouse of head's education: No education	-0.446***	-0.123***	-0.214	-0.051	-0.667***	-0.207***
	[0.169]	[0.040]	[0.206]	[0.046]	[0.220]	[0.057]
Spouse of head's education: Less primary	-0.329	-0.112	-0.182	-0.05	-0.376	-0.143
	[0.210]	[0.077]	[0.273]	[0.081]	[0.257]	[0.102]
Spouse of head's education: Primary	-0.107	-0.034	0.079	0.02	-0.357	-0.135
	[0.184]	[0.061]	[0.226]	[0.054]	[0.242]	[0.095]
Spouse of head's education: Secondary	-0.193	-0.063	-0.05	-0.013	-0.346	-0.131
	[0.196]	[0.068]	[0.255]	[0.068]	[0.250]	[0.098]
Spouse absent	-0.515**	-0.181**	0.144	0.035	-1.103***	-0.419***
	[0.219]	[0.084]	[0.277]	[0.063]	[0.292]	[0.100]
Head female	0.413***	0.110***	0.374**	0.080***	0.395***	0.127***
	[0.123]	[0.027]	[0.176]	[0.031]	[0.151]	[0.043]
Household size	0.013	0.004	0.030	0.008	0.000	0.000
	[0.017]	[0.005]	[0.025]	[0.006]	[0.021]	[0.008]
No. 0-4 year-old boys	-0.025	-0.008	-0.065*	-0.017*	0.01	0.004
	[0.028]	[0.009]	[0.039]	[0.010]	[0.036]	[0.013]
No. 0-4 year-old girls	-0.024	-0.007	-0.037	-0.01	-0.015	-0.005
	[0.028]	[0.009]	[0.038]	[0.010]	[0.036]	[0.013]
No. 5-17 year-old boys	-0.067***	-0.021***	-0.104***	-0.027***	-0.036	-0.013
	[0.021]	[0.006]	[0.030]	[0.008]	[0.027]	[0.010]
No. 5-17 year-old girls	-0.037	-0.011	-0.036	-0.009	-0.034	-0.012
	[0.023]	[0.007]	[0.030]	[0.008]	[0.029]	[0.011]
No. 18+ adult women	0.047	0.014	0.011	0.003	0.081**	0.029**
	[0.029]	[0.009]	[0.043]	[0.011]	[0.035]	[0.012]
Asset index – bottom 20%	-0.620***	-0.212***	-0.813***	-0.247***	-0.464***	-0.173***
	[0.078]	[0.028]	[0.107]	[0.036]	[0.106]	[0.041]
Asset index – second 20%	-0.523***	-0.178***	-0.606***	-0.181***	-0.463***	-0.174***
	[0.072]	[0.026]	[0.100]	[0.034]	[0.096]	[0.037]
Asset index - third 20%	-0.336***	-0.110***	-0.439***	-0.125***	-0.240***	-0.088***
	[0.065]	[0.022]	[0.091]	[0.028]	[0.084]	[0.032]
Asset index – fourth 20%	-0.142**	-0.045**	-0.240***	-0.066***	-0.055	-0.02
	[0.059]	[0.019]	[0.082]	[0.024]	[0.078]	[0.028]
Land	0.064	0.02	0.094*	0.024*	0.033	0.012
	[0.040]	[0.012]	[0.052]	[0.013]	[0.054]	[0.019]
Water availability in community (network connection)	0.07	0.022	0.032	0.008	0.107	0.038
	[0.053]	[0.016]	[0.070]	[0.018]	[0.070]	[0.025]
Energy source in community (non-wood sources)	0.555***	0.172***	0.217**	0.055**	0.900***	0.321***
	[0.077]	[0.024]	[0.100]	[0.025]	[0.106]	[0.038]
Rural	0.119**	0.038**	0.191**	0.051**	0.039	0.014
	[0.057]	[0.018]	[0.075]	[0.021]	[0.075]	[0.027]

	All		Boys		Girls	
	Coeff	M. effect	Coeff	M. effect	Coeff	M. effect
Constant	-3.613***		-4.504***		-3.449***	
	[0.268]		[0.349]		[0.367]	
Observed probability	0.710		0.773		0.640	
Predicted probability at mean	0.761		0.827		0.682	
Wald chi ² (50)	2356.66		1343.87		1370.32	
Prob > chi ²	0.000		0.000		0.000	
Pseudo R ²	0.207		0.208		0.215	
Observations	21,702		11,739		9,963	

Notes: Robust standard errors are in brackets. Covers children ages 6-17. Reference categories for dummy variables include more than secondary schooling for household head's schooling, number of adult men 18 and above for household composition, richest 20% of households in wealth index. Regions are included in estimation. * significant at 10%; ** significant at 5%; *** significant at 1%.

Figure 4.3. Predicted school attendance by age and sex



Note: Based on results given in Table 4.3.

Boys' school attendance rates are negatively affected by the father's absence, decreasing by 7.2 percentage points. The education level of the household head and the head's spouse affects the school attendance rates of children as well. For boys, having a household head who has no education decreases the probability of school attendance by 7.2 percentage points as compared to having a head with above secondary education. If the head has some schooling (but less than primary school), the decrease is 5.6 percentage points, whereas having a household head with primary or secondary education as compared to above secondary does not adversely affect boys' school attendance. In the case of girls, all schooling levels of the household head up to and including secondary decrease the probability of school attendance when compared to above-secondary schooling of the household head. When compared to such girls, those with a household head who has less than primary schooling have a 17.4-percentage-point lower probability of school attendance, those with a household head who has only primary schooling have an 11.7-percentage-point lower probability of school attendance, and those with a household head who has only

secondary schooling have a 6.7-percentage-point lower probability of school attendance. In other words, girl's schooling seems to be more responsive to the education level of the household head than boys' schooling. The absence of the household head's spouse (most often the mother of the child) and the spouse's education level affects the schooling of girls, but not of boys. Remarkably, absence of the household head's spouse reduces the probability of girls' school attendance by 41.9 percentage points! Apparently, the girl child, in effect, replaces the missing spouse by taking over his/her household responsibilities. Very large effects are also observed for girls in households where the spouse of the household head has no schooling, in which case the probability of girls' school attendance drops by 24.5 percentage points as compared to a child from a household where the spouse of the head has above secondary education.

Interestingly, when the head of the household is a woman, the probability of school attendance increases for both girls and boys. However, female headship is not a common occurrence: Only 4.2 percent of children reside in households where the head is a woman. These households are likely to differ in fundamental ways from households with male heads, and it is likely that the factors that make them different are the same factors increasing the probability of children's school attendance.

Household size does not affect children's probability of school attendance; however, conditional on the size of the household, an increase in the number of boys aged 0-4 and aged 5-17 decreases the probability of school attendance for boys, most probably due to sibling rivalry. However, no such rivalry is observed among girls; rather, among girls, the probability of school attendance increases with an increase in the number of female adults in the household. Most likely, a larger number of women translates into less housework for girls, resulting in more time for school.

Lower household income reduces the probability of school attendance. In the case of boys, the overall drop from the top to the bottom quintile is on the order of 20.1 percentage points. Whereas the move down from the top quintile to the fourth, third and second each entails a drop in school attendance probability of 4-5 percentage points, the drop increases to 6.6 percentage points when the move is from the second to the bottom quintile. In the case of girls, movement from the top to the bottom quintile reduces the predicted probability of school attendance by 13.3 percentage points. Whereas movement from the top to the fourth quintile or from the second to the first (bottom) quintile does not significantly reduce the probability of school attendance, the move from the top to the third quintile is statistically significant, reducing the probability of school attendance by 8 percentage points. These findings appear to indicate that boys' schooling is more income-sensitive than that of girls. Land ownership does not affect the school attendance probability of girls, but increases that of boys, although only marginally.

The availability of piped water in the community does not affect children's school attendance. However, both the use of non-wood/dung energy sources and rural residence increase the probability of boys' school attendance but do not affect that of girls. The fact that rural residence is not on its own a risk factor indicates that other adverse conditions associated with rural residence, rather than rural residence in and of itself, are the cause of lower average school attendance rates in rural areas as compared to urban areas.

5. Schooling outcomes of working children, non-working children and child labourers

This section of the report compares the schooling outcomes of working children and child labourers to those of non-working children in an attempt to see whether children's schooling is negatively associated with their employment. Schooling outcomes are measured on the basis of school attendance, grade for age and highest schooling level achieved.

5.1. School attendance by employment status

School attendance rates differ by employment status. While school attendance is estimated at 69.7 percent among non-working children ages 5-17, the corresponding rate among working children and child labourers is 53.6 percent and 51.8 percent, respectively (Figure 5.1). The negative association between children's schooling and employment is observed for both boys and girls. While the school attendance rate of working boys is 13.5 percentage points lower than their non-working counterparts, the corresponding gap between non-working and working girls is 19.7 percentage points. Boy child labourers have lower school attendance rates as compared to working boys (on the order of 3.8 percentage points), but the school attendance rate of girl child labourers is slightly higher than that of working girls.

When school attendance rates of working children and child labourers are compared to school attendance rates of non-working children by age, a meaningful relationship between work and schooling is observed for older children only. In the case of 5-11-year-olds, regardless of their work status, roughly 64 percent attend school. The lack of a negative association between schooling and employment in the youngest age group can be explained by the low employment and school attendance rates of 5-year-olds. When this age group is excluded and school attendance rates of working and non-working children aged 6-11 are compared³¹, an 8 percentage point gap emerges between the two groups, and this gap grows to 15 percentage points when only 7-11-year-olds are considered. In the case of 12-14-year-olds, while 84.7 percent of non-working children attend school, this figure drops to 58.8 percent among working children and to 57.0 percent among child labourers. Hence, the schooling gap among children aged 12-14 is around 27-28 percentage points. Among 15-17-year-olds, the negative association between schooling and work is even sharper. While 71.8 percent of non-working children aged 15-17 attend school, this figure drops to 41.2 percent among working children and further to 30.4 percent among child labourers, for a schooling gap of 41 percentage points between non-working children and child labourers.

³¹ Because children below age 14 are considered to be too young to work for even 1 hour per week, all working children in this age group are classified as child labourers.

Figure 5.1. School attendance rates by employment status and sex

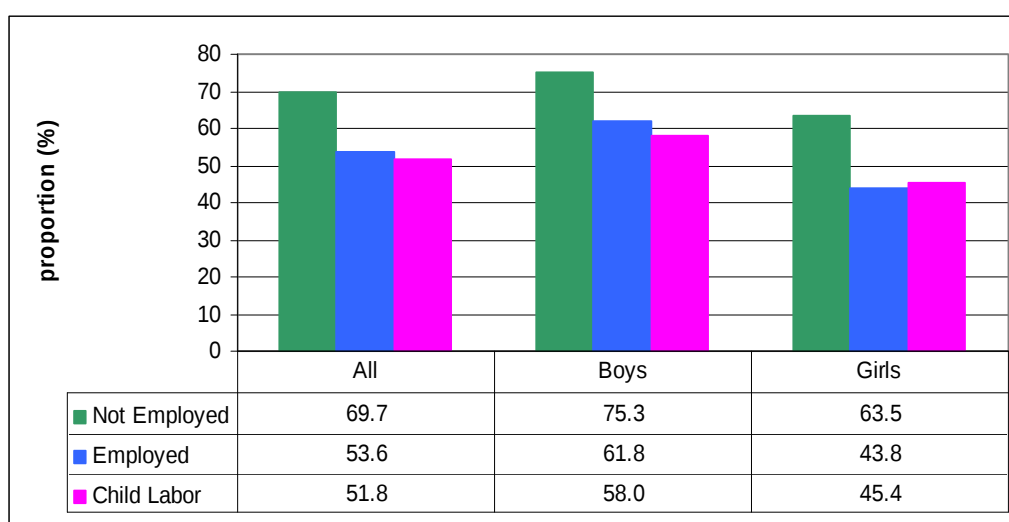
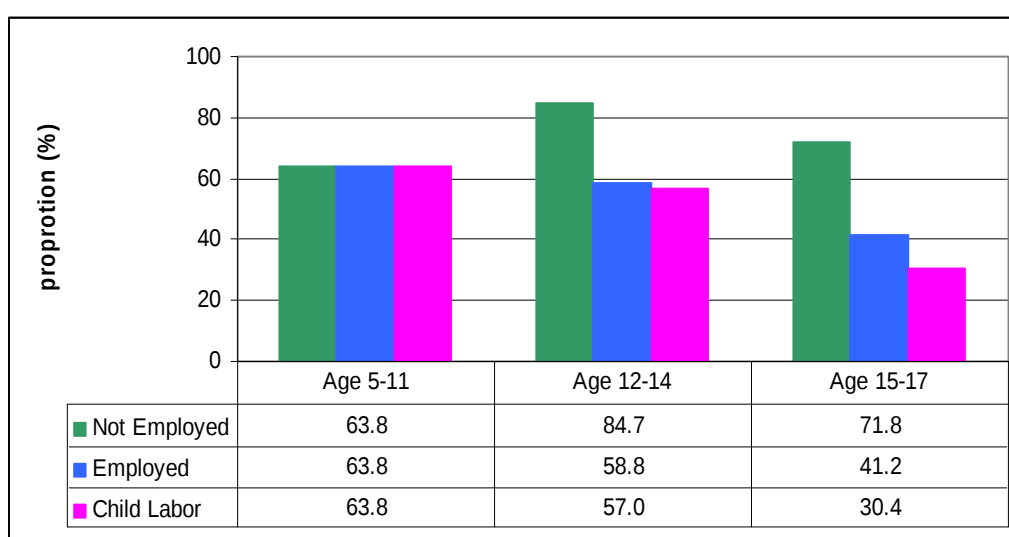


Figure 5.2. School attendance rates by employment status and age



The school attendance rates given above suggest that the negative association between school attendance and employment becomes stronger as children grow older. What is striking, however, is that there is a strong negative association between schooling and employment even among compulsory-school-aged children. This negative association does not necessarily point to a negative causal relationship between employment and school attendance. Since schooling and employment are both choice variables (this is true even among compulsory school-aged children, given the less-than-perfect enforcement of compulsory schooling), a shared underlying factor might lead children to drop out of school and enter into employment simultaneously. Furthermore, the causality may run in the opposite direction; for instance, if a household cannot meet a child's schooling expenses (e.g. school uniforms, books, school supplies and transportation), s/he will be taken out of school and, perhaps, put to work, or, where schooling quality is low, the household may not

perceive the benefit of schooling and may opt to send children to work instead of school so that they can acquire practical skills.

There are two main reasons that may explain the increasingly negative association between work and schooling observed once children exceed compulsory school age. First, children who are more likely to succeed in school tend to remain in school, while others drop-out, and there is a higher likelihood that the latter will work; and second, as children grow older, they develop physically and gain in maturity and are thus entrusted with more demanding jobs that are less compatible with schooling. Although it is not possible to determine whether a causal relationship exists between schooling and employment using the CLS data set, the negative association between the two outcomes is clear.

5.2. Grade-for-age by employment status of children currently attending school

Due to greater grade repetition or because they start school late, working children and child labourers may lag behind their non-working counterparts in school achievement (as measured by grade attained). Correcting for age, when the grade attainment of school-going non-working children, working children and child labourers are compared, non-working children are found in higher grade levels. For example, at age 17, working children lag behind their non-working counterparts by 0.4 grades, and child labourers lag further behind (0.7 grades).

A simple multivariate analysis performed on grade attainment of school-going children (corrected for age and sex) shows that working children and child labourers lag behind non-working children by, on average, 0.19 grades. The narrowness of this gap cannot be interpreted as indicating that employment is not an obstacle to children's schooling. Information on grade level is only available for school-going children, and, as discussed earlier, in comparison to non-working children, relatively larger proportions of working children and child labourers have dropped out of school or never attended in the first place. It is likely that children who are able to both work and attend school are a select group of working children who possess specific characteristics that promote their grade progression.

5.3. Previous and/or current school attendance by employment status

Some children who are currently not attending school have attended school in the past. In this section, working children, non-working children and child labourers are compared on the basis of whether or not they have ever attended school. Given that late school entry is common, the comparison is made based on children aged 10-17 years. As Figure 5.3 shows, a larger proportion of working children (21.1%) and child labourers (23.2%) have never been to school when compared to non-working children (9.3%). The schooling gap between working and non-working children is especially striking for girls: While 14.4 percent of non-working girls have never attended school, this rate jumps to 36.1 and 36.5 percent among working girls and girl child labourers, whereas rates for non-working boys, working boys and boy child labourers are 4.6 percent, 9.5 percent and 11.3 percent, respectively. The difference in findings between girls and boys suggests that combining school and work is especially incompatible for girls.

Figure 5.3. Any school attendance (previous and/or current) among children aged 10-17 by employment status and sex

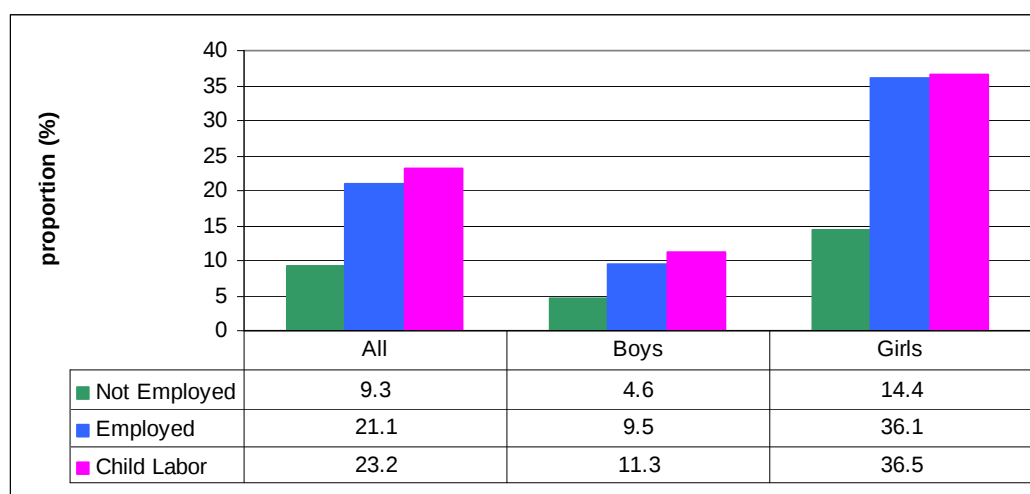


Figure 5.4. Previous school attendance among children aged 10-17 not currently attending school by employment status and sex

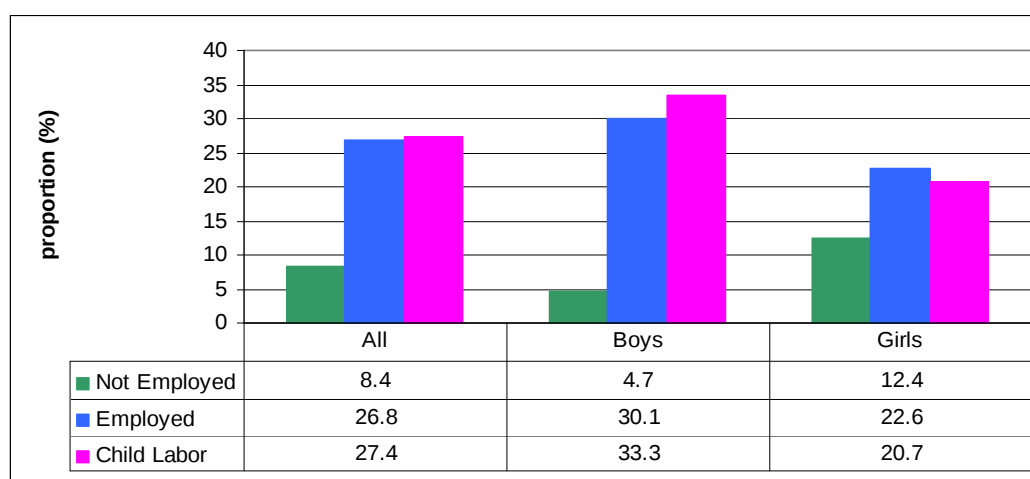


Figure 5.4 shows the proportions of girls and boys who are not currently attending school, but who attended school at some time in the past. Similar to the above findings, the school drop-out rate among non-working children (8.4%) is comparatively lower than that of working children (26.8%) and child labourers (27.4%). Although school drop-out rates of working boys and working girls are both higher than those of their non-working counterparts, the relationship between work and drop-out is stronger for boys than for girls. In other words, a larger proportion of working boys and boy child labourers drop-out as compared to girls (Figure 5.4). Despite the lower drop-out rates of working girls and girl child labourers as compared to working boys and boy child labourers, the proportion of girls currently attending school is lower than that of boys simply because a much lower proportion of girls than boys start school in the first place.

5.4. Highest schooling qualification obtained by employment status

The comparatively lower schooling attainment of working children and child labourers as compared to non-working children is also apparent when the highest schooling qualifications obtained by the two groups are compared. (Only children aged 15-17 are assessed here, since the earliest that children may obtain a school diploma is when they finish primary school.) As Table 5.1 shows, at age 15, the proportion of working children and child labourers without any qualifications are greater than that of non-working children, and this gap increases at ages 16 and 17. The gaps between working and non-working children at ages 15, 16 and 17 are 8 percentage points, 10 percentage points and 17.2 percentage points, respectively, whereas the gaps between child labourers and non-working children at ages 15, 16 and 17 are 7, 12 and 27 percentage points, respectively. That the schooling gap grows with age indicates that while a significant proportion of non-working children manage to eventually obtain a diploma – perhaps later than what their age would predict – this is not the case for working children and child labourers, the majority of whom are still without even a primary school diploma at age 17. The proportion of children who have certification above primary school (most often a general secondary school diploma) is limited to only 3.4 percent of all 17-year-olds, irrespective of their employment status.

Table 5.1. Distribution of children by highest school qualification

	Age 15		
Highest school qualification	Non-working	Working	Child labour
No qualification	82.2%	89.7%	89.5%
Pre-primary	4.7%	1.6%	1.4%
Primary school diploma	12.9%	8.6%	9.1%
Above primary	0.3%	0.1%	0%
	Age 16		
Highest school qualification	Non-working	Working	Child labour
No qualification	66.5%	76.3%	78.7%
Pre-primary	2.8%	2.4%	2.1%
Primary school diploma	29.7%	21.2%	18.8%
Above primary	0.9%	0.2%	0.3%
	Age 17		
Highest school qualification	Non-working	Working	Child labour
No qualification	48.6%	65.8%	75.6%
Pre-primary	2.3%	0.9%	1.0%
Primary school diploma	45.8%	29.8%	23.0%
Above primary	3.4%	3.4%	3.4%

As discussed earlier, girls lag behind boys in terms of school attendance, and this lower attendance is reflected in their school qualifications. A larger proportion of 17-year-old girls than boys have no school qualifications (Table 5.2). Notwithstanding this general observation, schooling credentials are found to be more closely associated with boys' employment than girls'. For example, while 37.2 percent of boys aged 17 have no qualification, this rate jumps to 59.3 percent for working boys and further to 68.3 percent for boy child labourers; comparative rates for girls are 60.9 percent for non-working girls,

77.1 percent for working girls and 79.1 percent for girl child labourers. In contrast, the proportions of both boys and girls with a primary school diploma declines among working children and child labourers in comparison to non-working children; again, the decline is sharper for boys than girls (Table 5.2).

Table 5.2. Distribution of children by highest school qualification and sex

	Boys - age 17		
Highest school qualification	Non-working	Working	Child labour
No qualification	37.2%	59.3%	68.3%
Pre-primary	1.0%	1.0%	1.4%
Primary school diploma	59.3%	35.9%	26.4%
Above primary	2.6%	3.8%	3.9%
	Girls - age 17		
Highest school qualification	Non-working	Working	Child labour
No qualification	60.9%	77.1%	79.9%
Pre-primary	3.7%	0.8%	0.4%
Primary school diploma	31.3%	19.2%	17.3%
Above primary	4.2%	2.9%	2.5%

Conclusion

The aim of this report was to present the results of the 2010 Child Labour Survey (CLS) conducted by the Central Statistical Organization (CSO) of the Republic of Yemen in collaboration with ILO-IPEC, the Social Development Fund and UNICEF. The survey results indicate that 1.6 million children (21%) aged 5-17 are employed. The employment rate reaches 39.1 percent among older children aged 15-17. However, even among younger children, the prevalence of employment is high: 11 percent of 5-11-year-olds and 28.5 percent of 12-14-year-olds are employed. Overall, children work for an average of 23 hours per week.

At 21.7 percent, the employment rate of boys is only slightly higher than that of girls (20.1%). In contrast, a larger proportion of girls (60.5%) as compared to boys (42.2%) engage in unpaid household services (UHS). While children average 10.5 hours per week on UHS, girls spend 5.3 hours more per week on UHS than boys.

School attendance is low in Yemen. The rate is 66.3 percent among all children aged 5-17, although it increases to 73.6 percent among children of compulsory school age (6-14 years). Significant decreases in attendance occur after nine years of compulsory education, with the school attendance rate dropping to 56.6 percent among 17-year-olds. Significant gender schooling gaps exist at both compulsory and non-compulsory schooling levels. Among compulsory-school-aged children (6-14-year-olds), the gender gap is on the order of 12.5 percentage points, and it grows to 19.3 percentage points among children aged 15-17.

Children's low school attendance reflects a combination of schooling-related problems. Perhaps the most important of these is that a significant proportion of children never start school – an estimated 12.7 percent of 17-year-olds, for example, never attended school – although delayed entry and grade repetition are also frequently observed. The existence of an urban/rural divide in schooling means that the brunt of schooling problems is borne by rural children. Even at the compulsory schooling level, there is a 14-percentage-point gap between the attendance rates of urban and rural children, and this gap grows to 20 percentage points among 15-17 year old.

The time-use patterns of children indicate that the majority of children are engaged in multiple activities. The most common time-use patterns are combining school with UHS (29.6%) and attending school without engaging in either UHS or work (29%). The proportion of children who work without attending school or performing UHS is low, at 3 percent.

Working children are mostly employed in agriculture (56.1%) and private households (29%) as unpaid agricultural or elementary workers. A smaller proportion of working children (7.9%) are found in wholesale and retail trade. Based on their working conditions and the nature of their work, 17.0 percent of children, or 81.1 percent of working children, are estimated to be child labourers. A sequential classification of risks shows 50.7 percent of child labourers to be engaged in hazardous work. Children too young to work for even one hour per week constitute another 36.6 percent of child labourers, with the remaining 12.7 comprised of children who work excessive hours for their age. When children

in hazardous work are examined in detail, the overwhelming majority (95.6%) is found to be employed in hazardous occupations, and the rest in hazardous economic activities (i.e. mining and construction).

A comparison of the school outcomes of non-working children, working children and child labourers reveals that working children and child labourers have distinctly lower school attendance rates when compared to non-working children. The difference is especially high between non-working and working girls, for whom school attendance rates differ by 20 percentage points. The risk of never attending school is also higher among working children and child labourers. Again, the increase in risk is higher among girls than boys: the proportion of 10-17-year-old working girls that have never attended school is 22 percentage points higher than that of non-working girls. Working children and child labourers also lag behind non-working children in terms of the highest school qualification achieved. Among 17-year-olds, 48.6 percent of non-working children have no school qualifications (not even a primary school diploma), whereas this figure increases to 65.8 percent among working children and further to 75.6 percent among child labourers.

Multivariate analyses on child work, child labour and schooling indicate that a combination of factors increases the risk of employment and child labour and reduces children's likelihood of school attendance. While poverty is an important correlate, the education level of the household head and, to some extent that of his/her spouse; household composition; place of residence; and community-level variables are also important correlates of child employment, child labour and schooling. In particular, older children from poor households with uneducated adults (i.e. the household head and his/her spouse) and large numbers of young children (0-4-years) located in rural communities that lack piped water and rely on wood, dung and similar sources of energy stand at a substantially higher risk of employment, child labour and non-attendance at school. A household's ownership of land also increases a child's likelihood of employment due to the availability of work for children.

Although girls are not any more likely to be employed than boys, they are less likely to attend school. A plausible explanation for this finding is girls' greater involvement in unpaid household services. Indeed, as the multivariate analysis demonstrated, the absence of the spouse of the household head does not change a girl's likelihood of employment, but dramatically reduces her likelihood of school attendance. This result can be interpreted as her taking over the responsibilities of the absent spouse of the household head (often the mother of the child). Community level factors – the availability of piped water and the use of wood/dung energy sources – are also closely associated with the employment of girls. While low household income contributes to the risk of both girls' and boys' employment, the importance of community-level factors (especially for girls) indicates that while any improvement in household income will help reduce the employment probability of children, it will not eliminate it completely.

Although a negative association exists between schooling and employment, it is not clear whether or not employment causes poor schooling outcomes. The failure of a significant proportion of non-working children to obtain even a primary school diploma indicates that the problems of low school attendance, later entry and early exit from the schooling system are general problems that are not unique to working children; however, as

reported here, these problems are more acute in the case of working children and child labourers. Given the challenges in the education sector, programs that center solely on the working lives of children are not likely to generate significant impacts in terms of schooling outcomes. Instead, multifaceted policies are needed to bring about improvements in the lives of children.

The fact that the majority of working children (including unpaid workers) are employed by their own households offers both a challenge and an opportunity to improve the well-being of working children. The challenge is to channel child labourers – i.e. children who are involved in hazardous work – to safer activities. For examples, with wage earners, one way of potentially improving the well-being of children is to place them in a safer activity with a different employer; however, such a solution could be difficult when work takes place within the child's own household. On the other hand, working with a child's own family may increase the likelihood of adults being receptive to measures designed to improve children's well-being; thus, awareness-raising activities could sensitize parents/guardians to the issue of child labour and ways of protecting their children.

At the same time, programs that channel more children to school and are able to keep them there can also make a difference. Conditional-cash-transfer programs that link social assistance to families with the regular school attendance of their children and food-for-school programs that distribute free food to families of school-going children could also improve children's school attendance while providing relief to poor households.

Even with programs that make schooling attractive to children (and to their families), integrating older children into formal education may prove difficult. Instead, skills-training programs could help to equip these children with basic skills and vocations that are useful in the labour market. In this regard, special attention needs to be paid to the needs of rural girls, who constitute the largest proportion of the older out-of-school child population.

Improvements in infrastructure – in particular, improving households' access to water and non-wood/dung energy sources – would greatly improve the well-being of children, since a significant proportion of them are engaged in fetching water and firewood for their own household and other households.

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Objective: Estimation of child labour and its different characteristics at the national level separately for rural and urban areas.

Target Population: Households in Yemen comprise the target population. The survey covered all 21 governorates. In all but one of these governorates, rural and urban areas were covered separately. The survey excluded households in nomad (Bedouin) areas as well as the institutional population (i.e. individuals residing in hospitals, hotels, etc.).

Sampling Design: A stratified, two-stage sample design was adopted, with 21,581 Enumeration Areas (EAs) of approximately 150 households each across the country – 15,948 in rural areas, and 5,634 in urban areas. The sample design was based on the 2004 Population Census. The EAs are geographically compact, mutually exclusive and exhaustive, and easily identifiable. Thus, EAs were treated as Primary Sampling Units (PSUs), or First Stage Units (FSUs), and households are treated as Ultimate Sampling Units (USUs), or Second Stage Units (SSUs).

Sample size: Due to budget constraints, only 822 EAs were surveyed. This sample size was adequate for providing estimates at the national level and at rural and urban levels; however, it was not large enough to provide estimates at the governorate level, which would have required a much larger sample.

Stratified: The sample frame was divided into four strata based on the illiteracy rate.³³ EAs were first divided into rural and urban areas and then into areas with low literacy and remaining areas, with the assumption that EAs with low literacy (i.e. high illiteracy) would have more child labourers. After calculating the cumulative rate of illiteracy separately for urban and rural areas, the cut-off figure for illiteracy rates was established at 76 percent for rural EAs and 36 percent for urban EAs. Accordingly, 86 percent of households in urban areas and 87 percent in rural areas were categorized in strata with low illiteracy (Table A.1). Thus, the four strata were formed as follows:

Stratum 1: EAs in rural areas with illiteracy rates of 76% or more.

Stratum 2: EAs in rural areas with illiteracy rates of 0-75%.

Stratum 3: EAs in urban areas with illiteracy rates of 36% or more.

Stratum 4: EAs in urban areas with illiteracy rates of 0-35%.

³² This section of the report has been contributed by the Central Statistical Office of Yemen.

³³ Illiteracy rate = $100 \times (\text{number of illiterate persons aged 6 years or more} \div \text{total number of persons aged 6 years or more})$.

Table A.1. Illiteracy rate by Urban and Rural Areas, 2004

Illiteracy Rate	No. EAs in Urban	No. EAs in Rural	Total No. EAs	Percent Urban to Total %	Percent Rural to Total %	Total %	Cumulative Percent Urban	Cumulative Percent Rural	Cumulative Percent Total
0-5	4	5	9	0	0	0	0	0	0
6-10	68	3	71	1	0	0	1	0	0
11-15	491	12	503	9	0	2	10	0	3
16-20	1,265	85	1350	22	1	6	32	1	9
21-25	1,455	402	1857	26	3	9	58	3	18
26-30	995	849	1844	18	5	9	76	9	26
31-35	572	1,291	1863	10	8	9	86	17	35
36-40	356	1,561	1917	6	10	9	92	26	44
41-45	178	1,578	1756	3	10	8	95	36	52
46-50	97	1,669	1766	2	10	8	97	47	60
51-55	59	1,631	1690	1	10	8	98	57	68
56-60	34	1,553	1587	1	10	7	99	67	75
61-65	19	1,281	1300	0	8	6	99	75	81
66-70	15	1,052	1067	0	7	5	100	81	86
71-75	16	860	876	0	5	4	100	87	90
76-80	7	657	664	0	4	3	100	91	93
81-85	2	529	531	0	3	2	100	94	96
86-90	0	397	397	0	2	2	100	97	98
91-95	0	296	296	0	2	1	100	99	99
96-100	1	237	238	0	1	1	100	100	100
Total	5,634	15,948	21,582	100	100	100			

Allocation Sample: The allocation of PSUs was based on the following principles: (i) the variance of study variables is higher for urban areas compared to rural areas; and (ii) EAs with higher illiteracy rates have higher numbers of child labourers. First, the total sample size was allocated to rural and urban areas at the national level proportional to the number of EAs based on the 2004 Population Census, with double weighting to urban areas. Then, the number of EAs within rural areas was proportionally allocated between Stratum 1 and Stratum 2, with double weighting to Stratum 1. Similarly, the number of EAs within urban areas was proportionally allocated between Stratum 3 and Stratum 4, with double weighting to Stratum 3 (Table A.2).

Table A.2. PSUs allocation by stratum

Stratum No.	% Illiteracy Rate	Total No. of EAs in Frame	No. PSUs in Sample ³⁴
1	76 and More	2,117	110
2	(0-75)	13,831	368

³⁴ EAs is the Primary Sampling Unit (PSU).

Stratum No.	% Illiteracy Rate	Total No. of EAs in Frame	No. PSUs in Sample ³⁴
Total Rural Strata (Stratum 1+2)		15,948	478
3	36 and More	784	80
4	(0-35)	4,850	264
Total Urban Strata (Stratum 3+4)		5,634	344
Grand Total		21,582	822

Sample Selection: Selection took place in two stages, with the primary sampling units (PSUs), i.e. the enumeration areas (EAs), selected in the first stage and the secondary sampling units (SSUs), i.e. the households, selected in the second stage.

First Stage: EAs in each stratum were sorted by governorate, within governorates by sector, within sectors by section, and within sections by EA in ascending order according to their codes. The sorted EAs in each stratum were treated as the EA frame. Allocated EAs were selected from the frame within a sub-stratum by circular Systematic Sampling (CSS) with equal probability in the form of two independent samples (say, Replicate). The allocation for each replicate was half that of the stratum allocation (Table A.3).

Table A.3. PSU allocation by stratum and replicate

Stratum No.	Replicate No.	No. PSUs in Sample
1	1	55
1	2	55
Total of Stratum 1		110
2	1	184
2	2	184
Total of Stratum 2		368
Total of Rural Strata		478
3	1	40
3	2	40
Total of Stratum 3		80
4	1	132
4	2	132
Total of Stratum 4		264
Total of Urban Strata		344
Grand Total		822

Second Stage: Due to the lack of availability of updated lists of households for the selected EAs that could be used as sampling frames for households, all households in the selected EAs were listed by door-to-door inquiry. Following listing, households in each selected EA were divided into two groups in order to construct sampling frames for SSS 1 (households with working children aged 5-17 years) and SSS 2 (remaining households).

For each PSU, 6 households from SSS1 and 6 from SSS2 were selected from the updated lists, for a total of 12 households. In certain cases, substitution of households was permitted. If a selected household was temporarily vacant or could not be located, it was substituted with the next household on the updated list, and if the housing unit of a selected household was occupied by another household that was on the updated list, the new household was used as a substitution. In cases where a selected household had a head other than the one found on the updated list, the household was retained, and the name of the head was changed.

In the Sa'ada governorate, difficulties were encountered in contacting selected households due to security reasons and, as a result, the selected households in that governorate could not be interviewed. Therefore, adjustments were made to the sampling weights of the Al-Jouf governorate, which borders the Sa'ada governorate and shares similar household characteristics, in order to render the sample representative of the country at large.

Upon completion of fieldwork, the results of all household interviews were documented, and the response rate was calculated.

Estimation Procedures:

Notations:

r = subscript for replicate ($r = 1, 2$)

s = subscript for Stratum ($s = 1-4$)

i = sample EA number

j = subscript for second stage stratum ($j = 1, 2$)

k = subscript for sample household

l = subscript for individual (for child characteristics, the child is the individual)

N = total number of EAs in a stratum

n = number of sample EAs selected in a replicate = half of the number of sample EAs to be selected from a stratum

H = number of households in a frame of second stage stratum

h = number of households surveyed in a second stage stratum

C = total number of persons in a household (for child characteristics, it is the number of children aged 5-17 years in a household)

x, y = observed value of characters X, Y under estimation

$\hat{X}, \hat{Y}$ = estimate of population total of the characters X, Y .

Then,

y_{rsijkl} = observed value of the character Y for the l^{th} person of k^{th} sample household of j^{th} SSS of i^{th} sample EA of s^{th} stratum in r^{th} replicate.

Estimation formula for any individual characteristic of r^{th} replicate is:

$$\hat{Y}_r = \sum_s \frac{N_s}{n_s} \sum_{i=1}^{n_s} \sum_{j=1}^2 \frac{H_{rsij}}{h_{rsij}} \sum_{k=1}^{h_{rsij}} \sum_{l=1}^{C_{rsijk}} y_{rsijkl}$$

For household characteristics the sum over l is not needed, and the above formula becomes:

$$\hat{Y}_r = \sum_s \frac{N_s}{n_s} \sum_{i=1}^{n_s} \sum_{j=1}^2 \frac{H_{rsij}}{h_{rsij}} \sum_{k=1}^{h_{rsij}} y_{rsijk}$$

In both the above formulas, $s =$ $\left\{ \begin{array}{l} 1, 2 \text{ for rural areas} \\ 3, 4 \text{ for urban areas} \end{array} \right.$
1-4 for national level

The pooled estimate $\hat{Y}$ based on two replicates at any level of aggregation may be obtained as:

$$\hat{Y} = \frac{1}{2} \sum_{r=1}^2 \hat{Y}_r$$

Estimates of ratios:

Let $\hat{Y}$ and $\hat{X}$ be the estimates for two aggregate characters X & Y respectively at a specific level.

Then, the estimate of the ratio $R = \frac{Y}{X}$ (X is the population total of an auxiliary variable) is given as $\hat{R} = \frac{\hat{Y}}{\hat{X}}$

Multipliers (weights):

The formula for multipliers is given below:

For replicate estimates,

$$M_{rsij} = \frac{N_s}{n_s} \times \frac{H_{rsij}}{h_{rsij}}$$

For combined estimates,

$$M_{rsij} = \frac{1}{2} \times \frac{N_s}{n_s} \times \frac{H_{rsij}}{h_{rsij}}$$

After calculating the weight of each replicate in the stratum (and substituting the Al-jawf governorate for the Sa'ada governorate), calibrations of governorates were performed according to the total population in Yemen in 2009, which was 22,491,858.

Error estimates

Error estimates were obtained on the basis of replicate estimates of the stratum totals. The estimates of the variances of $\hat{Y}$ and $\hat{X}$ were given as

$$\hat{V}(\hat{Y}) = \frac{1}{4} \sum_s (\hat{Y}_{s1} - \hat{Y}_{s2})^2$$

$$\hat{V}(\hat{R}) = \sum_s [(\hat{Y}_{s1} - \hat{Y}_{s2})^2 - 2\hat{R}(\hat{Y}_{s1} - \hat{Y}_{s2})(\hat{X}_{s1} - \hat{X}_{s2}) + \hat{R}^2(\hat{X}_{s1} - \hat{X}_{s2})^2] \div 4\hat{X}^2$$

where $\hat{Y}_{s1}$ and $\hat{Y}_{s2}$ are the estimates of the total of the s^{th} stratum obtained from Replicates 1 and 2, respectively, and $\hat{X}_{s1}$ and $\hat{X}_{s2}$ are the estimates of X based on Replicates 1 and 2, respectively.

The estimates of Coefficient of Variation (CV) of $\hat{Y}$ and $\hat{R}$ are given by

$$CV(\hat{Y}) = \frac{\sqrt{\hat{V}(\hat{Y})}}{\hat{Y}} \times 100$$

and

$$CV(\hat{R}) = \frac{\sqrt{\hat{V}(\hat{R})}}{\hat{R}} \times 100$$

Appendix B. Concepts and Definitions

Child: In line with the 1989 UN Convention on the Rights of the Child (CRC) and the 1999 ILO Convention No. 182 on the Worst Forms of Child Labour, a child is defined as an individual under the age of 18. Since it is commonly agreed that a child under age five is too young to engage in work or start school, the CAS considers children aged 5-17 years only.

Children in employment (working children): Children (aged 5-17) are defined as working (or employed) if they worked for at least one hour during the reference period or if they had a job or business from which they were temporarily absent. The UN System of National Accounts (SNA) delineates what is and what is not an economic activity. Broadly speaking, all market-oriented activities, production of goods for own-consumption and certain services rendered for and by household members (such as major household repairs, fetching water or carrying firewood for household use) are considered economic activities, and those engaged in them are considered to be employed.

Child labour: Child labour in Yemen is defined as children who are engaged in work unsuitable for their capacities as children or are in work that may jeopardize their health, education or moral development. The child labour definition is based on ILO Convention No. 138 on Minimum Age (1973) and ILO Convention No. 182 on the Worst Forms of Child Labour.

For the purposes of this study, all persons younger than 14 are considered too young to work even for 1 hour per week. For older children (i.e. 14 to 17), in accordance with the recommendation of the Central Statistical Organization we use a 30 hour threshold to identify child labourers. Regardless of their hours of work children engaged in work unsuitable for their capacities as children or that may jeopardize their health, education or moral development are considered as child labourers. Thus, child labour includes:

- Children employed in hazardous industries, including mining and quarrying, and construction;
- Children employed in hazardous occupations drawn up by the Ministry of Social Affairs and Labor in conjunction with ILO Convention 182 (for a list of occupations see Appendix C);
- Children aged 5-13 who are employed (even if only for 1 hour per week);
- Children aged 14-17 who work for more than 30 hours per week.

Economic activity: Includes all types of establishments or businesses in which persons are engaged in the production and/or distribution of goods and services. The national classification system of industries has been used in the survey.

Household: A household is defined as a person or group of persons who live together in the same house or compound, share the same housekeeping arrangements and are catered for as one unit. Members of a household are not necessarily related (by blood or

marriage), and not all those related in the same house or compound necessarily belong to the same household.

Occupation: An occupation is defined as a type of economic activity a person usually pursues to earn income in cash or in kind. If more than one occupation is held, the one in which the maximum working hours were spent during the reference period is regarded as the main occupation. If equal time is spent, the one providing the larger share of income is regarded as the main occupation. The national classification system has been used in the survey.

Work: Any activity that falls within the production boundary of the UN System of National Accounts (SNA) is considered work. This boundary covers all market production and certain types of non-market production, including production and processing of primary products for own consumption, own-account construction and other production of fixed assets for own use. Whether the activity takes place in the formal or the informal sector, in urban or rural areas, or whether it is paid or not is of no significance; however, unpaid domestic services rendered within the household by and for household members are excluded from this definition of work.

Unpaid Household Services (UHS): Any activity that falls within the general production boundary but outside of the production boundary of the UN System of National Accounts (SNA) is considered as unpaid household services. These are services rendered by and for household members without pay. They include such activities as cooking, ironing, house cleaning, shopping, looking after children, small repairs and the like. A few unpaid household services – carrying water and fetching firewood for household use and major household repairs – are treated within the SNA production boundary and therefore, are considered as work.

Appendix C. Hazardous occupations of child labour based on the legislations of Ministry of Social Affairs and Labor

ISCO-88		Article (21): It is not permitted to employ children under the age of 18 years in the industry, the following works:
711	931	Underground work in mines and quarries and all the work on the extraction of minerals, coal and stones of all kinds
822		Manufacture of explosives, and related activities
813		Melt the glass and ripening
721		Oxygen-acetylene welding and electricity
822		Made of tin and metal compounds containing more than 10% of lead.
812		Work in furnaces designed for melting mineral substances or replication or production
822		Making the first ocher or ocher yellow and lead dioxide (silicon) and lead carbonate and lead oxide and sulfate orange and lead chromate and silicate
822		Different industry of lead mixer containing more than 10% of lead
822		The manufacture of paints containing lead or its compounds or alloys
822		Industry dyes containing lead or its compounds or alloys or arsenic or its compounds
822		Industry frames containing lead or arsenic and all their applications to adorn minerals and other
815		Extraction of silver from lead-Metallurgy
822		Manufacture or repair of electric accumulators lead - Batteries
713		Acts of spray paints containing lead or its compounds or alloys or arsenic in a decorative
815		Industry distillation of coal drops
815		Refining industry and the oil filter
815		Industry, production and distillation of petroleum and gasoline
822		Chlorinated derivatives industry and the nitrogen and chlorine - Ozoatah of gasoline, oil, salts of ethylene
822		Industry, dyes and varnishes, solvents and ink and all products containing oil or gasoline
822		Ethylene and dyes industry (and industry workshops and return nitrogen to the aniline derivatives)
815		Packing and cleaning Elsafaúkh, drums and other instruments designed to collect oil and gas and their derivatives
822		Waste collection and classification
724		Electrical work
723		Acts of auto repair shops
921	614	Work in the forests and cut trees and climb to reap the fruits
827		Operators of food machines
921		Spraying of agricultural pesticides and fertilizers
834		Sea fishing, diving, peeling fish with sharp tools
832		Driving vehicles and motorcycles
516		Participate in the work of firefighters
822		Manufacture of chlorine and hypochlorite and similar compounds
822		Cianor acid water industry and its compounds - salts and Elvirossianor
711		Stone saws
742		Wood saws
722		Iron saws
722		Aluminum saws
813		Saws for glass
821		The cement industry

812	Gypsum Industry
712	Manufacture of refractory bricks
821	Industry plaster
829	Fertilizer industry of fecal material or animals or manure or blood and bone work in the warehouses
822	Sulfur coal industry, its uses
822	Sodium industry
823	Rubber industry - melt the rubber
815	Distillation Alrtinjiat
744	Leather tanning and all work related to making them and their trade
741	Skinning animals and work in the massacres and slaughter houses
829	The coal industry from the bones of animals
827	Work in tobacco and tobacco plants and dye scrolls
322	Work in the role of X-rays - Roentgen - a nurse
915	Loading and unloading and carrying goods in the docks, quays, ports and places of storage and portorage in general
915	Row cotton seeds in stores holds of ships
833	Manufacture and use of asphalt for the paving of roads
721	Self-welding metals
821	Manufacture of chromium and its compounds
827	Work in the factories making matches - the process of melting and mixing of sulfur compounds phosphorous
913	Work in the public baths

Article (22): It is not permitted employment of children under the age of 18 years to carry the ballast or drag or pushed if the increased weights for the following:

Weights of 15 kg for males and 10 kg for females

933	Ballasts that drive on the tracks 400 kg for males and 300 kg for females
933	Ballasts that drive on a cart with two wheels 150 kg for males and 100 kg for females
933	Ballasts that drive on a cart with one wheel 50 kg for males and 35 kg for females

Article (23): industries and business that may not be to employment children if their age is less than 18 years and greater than 14 years unless they have a medical certificate attesting to the health and physical ability to do which is as follows:

Cooking blood

Cooking bones

822	Cooking soap
-----	--------------

Melt the grease

743	Cotton ginning (work in the wards in which the machine tools, known as the sieve)
711	Stone carving, marble and drilled and trimmed
743	Spinning and weaving silk, cotton, linen, wool, machinery mechanical operated motor
743	Work on hand-looms weaving or knitting machines
712	Construction work, except for rural buildings that exceed a height of 8 meters
722	Work with fire in the blacksmith industry
722	Beating copper and iron
743	The preparation of wool
913	Service in homes, hotels and restaurants

Appendix D. Questionnaire

Republic of Yemen
Ministry of Planning and
International Cooperation
Central Statistical Organization



In cooperation with
ILO
SFD
UNICEF

Questionnaire No.

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Child Labour Survey Questionnaire 2010

Administrative Data

Governorate	District	subdistrict	Urban Status	Urban				Rural	
			1-Urban	City	Hai	Hara	Street	Village	Subvillage
			2-Rural						
1	2	3	4	5	6	7	8	9	10

Census and Organizational Data

Sector No.	Section No.	EA. No.	Block No.	Building No. in Residential Complex. Block, Village or Subvillage	Census Entrance No. in Building	Dwelling Unit No. In Building	Stratum No.	Replicate Type	EA Series No. in Stratum	Household Series No. in EA.	Household selection order series in EA at Sampling	Household type by child labour status
11	12	13	14	15	16	17	18	19	20	21	22	23
												1-Working Children 2-Unworking Children

Household Data Summary

No. of members in household	No. of children aged (5-17) years
24	25

For interviewer: If additional questionnaires used, mark (✓) in the box

Warning: The data of this questionnaire are secret under the article (5) of statistical law no. (28) for 1995 and are not used for statistical unpurposes.

PART I: ADULT QUESTIONNAIRE

(Adressed to the most knowledgeable member of household)

Section I: Household Composition and Characteristics for All Household Members

Circle around serial no. in household?	Can you please provide full (triple) names of all persons who are part of this household, beginning with the head of the household?	Relationship with head of household:	<u>Sex</u> (Gender)	<u>Age</u>		
	<u>Concept of household:</u> A household is defined as a person or group of persons who live together in the same house or compound, share the same housekeeping arrangements and are catered for as one unit. Members of a household are not necessarily related (by blood or marriage) and not all those related in the same house or compound are necessarily of the same household)	Which household member provided information on the individual? (write serial number from A1)	What's (Name) relationship to head of the household?	What is the sex of each of these individual household members?	How old was (NAME) at his/her last birthday?	
			1- Household head. 2- Spouse. 3- Son / Daughter. 4- Boy's wife/daughter's husband. 5- Grandchild. 6- Father/Mother. 7- Brother/Sister. 8- Other relatives. 9- Servant (live-in). 10- Non-relative.	1- Male 2- Female	<u>For interviewer:</u> If the age of child is less than year, write in the two boxes "0".	
A1	A2	A 3	A4	A5	A6	
A 7						
1		_ _	_ _	_	_ _	_
2		_ _	_ _	_	_ _	_
3		_ _	_ _	_	_ _	_
4		_ _	_ _	_	_ _	_
5		_ _	_ _	_	_ _	_
6		_ _	_ _	_	_ _	_
7		_ _	_ _	_	_ _	_
8		_ _	_ _	_	_ _	_
9		_ _	_ _	_	_ _	_
10		_ _	_ _	_	_ _	_
11		_ _	_ _	_	_ _	_
12		_ _	_ _	_	_ _	_
13		_ _	_ _	_	_ _	_
14		_ _	_ _	_	_ _	_
15		_ _	_ _	_	_ _	_

If additional questionnaires used, mark (✓) in the box

PART I: ADULT QUESTIONNAIRE

(Addressed to the most knowledgeable member of household)

Section I: Household Composition and Characteristics for All Household Members

Circle around serial no. of targeted members in aged 5 and over	For all household members		Marital status for members aged (10) years and over?	
	Natural Mother's serial no.	Natural Father's serial no.	Write down no. of answer	For only those married
	Please indicate serial's number of natural mother's (if she is among the household members)	Please indicate serial's number of natural father's (if she is among the household members)	1- Both he/she married (continue) 2- Bachelor/discoveret (Member hasn't married yet) 3- Divorced 4- Widow/widowed	Write down no. of husband'/wife's serial's number from A1 the person's serial number For interviewer: 1- If the member has more than one wife, write down in the box no. the only first wife. 2- If husband or wife isn't living with household, write down no. (98)
	<u>For interviewer:</u> If mother isn't living with household, write down no. (98) If mother is dead, write down no. (99)	<u>For interviewer:</u> If father isn't living with household, write down no. (98). If father is dead, write down no. (99)	Skip to A12 For interviewer: cases (2,3,4) skip to A12	
A1	A8	A9	A10	A11
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Section II: Educational attainment for all household's members aged 5 and above

Circle around serial no. of targeted member aged 5 years and over	Has (NAME) ever attended school?	What is/was the main reason why (NAME) has never attended school?	Can (NAME) read and write a short, simple statement with understanding in any language?	For those enrolled in 2008/2009 What is the level of school and grade (year) that (NAME) is attending?		What's the highest qualification that member has got?
	<u>For Interviewer:</u> 1- Yes, still attending (write down in the box no. (1) and skip to question no. A15) 2- Yes, but not any more (write down in the box no. (2) and skip to question no. A16) 3- No. never attended (write down in the box no. (3) and continue)	1- Too young... 2- Disabled/illness.... 3- No school/school too far.... 4- Cannot afford schooling..... 5- Family didn't allow schooling (going to school) 6- Not interested in school..... 7- Education not considered valuable.. 8- School not safe..... 9- To learn a job.... 10- To work for pay... 11- To work as unpaid worker in family business/farm..... 12- Help at home with household chores... 13- Not available teachers 14- Difficult access to school.... 15- No separate school available for female	1- Read and write 2- Only read 3- No read and write <u>For interviewer:</u> Write down no. of answer and skip to A17	<u>Schooling grades:</u> 1- Pre-school..... 2- Primary..... 3- Vocational institute before secondary 4- Secondary.... 5- Institute after secondary.... 6- University (Bachelor/licentiate) 7- Master... 8- PhD <u>For interviewer:</u> (Write down no. grade and level)		1- Read and write without qualification. 3- Pre-primary.... 4- Primary/secondary/unified... 5- Vocational diploma before secondary..... 6- Vocational secondary... 7- General secondary..... 8- Dipoma after secondary... 9- Bachelor/licentiate 10- Diploma after university... 11- Master... 12- PhD <u>For interviewer:</u> Write down no. the appropriate answer
				A15		
A1	A12	A13	A14	Level	Grade	A16
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						

Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week

A: EMPLOYMENT

serial no. of member	Did (NAME) engage in any work at least one hour during the past week? 1- Yes 2- No	During the past week did (NAME) do any of the following activities, even for only one hour? 1- Yes 2- No								
		a. Run or do any kind of business, big or small, for himself/herself or with one or more partners? Examples: Selling things, making things for sale, repairing things, guarding cars, hairdressing, crèche business, taxi or other transport business, having a legal or medical practice, performing in public, having a public phone shop, barber, shoe shining etc. b. Do any work for a wage, salary, commission or any payment in kind (excl. domestic work)? Examples: a regular job, contract, casual or piece work for pay, work in exchange for food or housing c. Do any work as a domestic worker for a wage, salary or any payment in kind? d. Help unpaid in a household business of any kind? (Don't count normal housework.) Examples: Help to sell things, make things for sale or exchange, doing the accounts, cleaning up for the business, etc. e. Do any work on his/her own or the household's plot, farm, food garden, or help in growing farm produce or in looking after animals for the household? Examples: ploughing, harvesting, looking after livestock f. Do any construction or major repair work on his/her own home, plot, or business or those of the household? g. Catch any fish, prawns, shells, wild animals or other food for sale or household food? h. Fetch water or collect firewood for household use? i. Produce any other good for this household use? Examples: clothing, furniture, clay pots, etc.								
		1- Yes, write no. (1) and skip to A20 2- No, write no. (2) and continue For interviewer: Read each of the options untill the first affirmative response is obtained. If any of answers: (Yes), write down no. (1) and skip to (A20) If all of answers: (No), write down no. (2) and continue.....								
	A17	A18								
		a	b	c	d	e	f	g	h	i
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										
11										
12										
13										
14										
15										

Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week					
A- Employment					
Serial no. of member	Even though (NAME) did not do any of these activities in the past week, does he/she have a job, business, or other economic or farming activity that he/she will definitely return to?	Main occupation		Authority name	Property Sector
		Describe the main job/task (NAME) was performing e.g. carrying bricks; mixing baking flour; harvesting grain or qat; etc.		Write name of authority where member did/do?	What's the kind of property sector where the (NAME) worked/is working?
				For example	01- Public. 02- Mixed. 03- Cooperative. 04- Local Private. 05- Foreign Private. 06- Joined Private. 07- Waqf, (Endowment). 08- NGOs. 09- Regional or International Organizations.
				1. Ministrey of planing and int.coop 2. General post authority 3. Yemen development reconstraction Bank 4. AL-Azzani shops for ready cloths 5. Technical maintenance and repair cars mechanic-shop 6. International legal consultations office 7. General food staff grocery 8. No name (?)	
For interviewer:					
1- Yes, write down no. (1), and continue					
2- No, write down no. (2) and skip to A34		For interviewer: "Main" refers to the work on which (NAME) spent most of the time during the week			
	A19	A20		A21	A22
		Occupation/ Main Work	Code		
1	☐				
2	☐				
3	☐				
4	☐				
5	☐				
6	☐				
7	☐				
8	☐				
9	☐				
10	☐				
11	☐				
12	☐				
13	☐				
14	☐				
15	☐				

Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week

A- Employment					
Serial no. of member	Work location	Economic activity		Status in Employment	Has (NAME) been employed on the basis of:
	Where did (NAME) carry out his/her main work during the past week?				
	1- Ministries, government institution or company	Describe briefly the main activity i.e. goods produced and services rendered where (NAME) is working For example: 1. Manufacture of soft drink and being packaged. 2. Manufacture of cloths and strings. The members who aren't working in any authority or establishment should be written the activity which they do in detail: 1. Selling housing tools in retail 2. Wholesale vegetables 3. Paving and prinking the buildings.	What's the work situation for member during the last week?		1-Written contract 2-Oral agreement 3- Do not know skip to A29 continue
	02-Mixed institutions or companies		<u>Paid workers</u> 1-Workers in paid for the agriculture and fishing. 2-Workers in paid to the non-agriculture and fishing.		
	03-Private institutions or companies		<u>Employers and workers for their own account (unpaid)</u> 3- Employer (his/her own business with employees.....) 4-Own account worker (his/her own business without employees.....)		
04-Shops / Workshops /Offices	<u>Workers unpayable</u> 5-Ingaged in family business, farming, grazing, collecting firewood ..etc. 6-Unpaid working (Volunteers / Trainees)				
05-Inside dwelling	Skip to A29 Skip to A31				
06-Footpath kiosk in the market					
07-Hawker					
08-Location of building and construction (not affiliated institutions)					
09-Farm /meadow					
10-Transport mean (not followed to an institution)					
11-Another place didn't previously mention					For interviewer: Write down no. the appropriate answer
A1	A23	A24		A25	A26
		Activity	Code		
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					

Section III: Current Economic Activity Status of All Household Members (5 and above) during the reference week

A- Employment			
Serial no. of member	Is (NAME)'s contract/agreement.....	What is the duration of (NAME)'s contract/ agreement?	What is (Name's) average monthly cash income from the main work? (In local currency, in Y.R)
	1- Limited duration (continue)	1- Less than 12 months	
	2- Unlimited duration	2-From 12 to 36 months	
	3-Don't know	3-More than 36 months	
		4-Don't know	
For interviewer: Write down no. the appropriate answer		For interviewer: Write down no. the appropriate answer	
	A27	A28	A29
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week

A- Employment														
Serial no. of member	What other benefits does (NAME) usually receive in his/her main work?													
	For interviewer:- (Read all the following benefits) 1. Not applicable if (A25 =3, 4, 5 or 6) 2. Weekly rest days 3. Medical expenses 4. School expenses 5. Assistance with schooling 6. Paid sick leave 7. Annual vacation 8. Free/subsidized accommodation 9. Meals / Food 10. Paid leave 11. Clothing 12. Transportation 13. Other 14. Nothing													
	For interviewer: (Circle around no. of appropriate answer/s (multiple answers are allowed))													
	A30													
1	1	2	3	4	5	6	7	8	9	10	11	12	13	14
2	1	2	3	4	5	6	7	8	9	10	11	12	13	14
3	1	2	3	4	5	6	7	8	9	10	11	12	13	14
4	1	2	3	4	5	6	7	8	9	10	11	12	13	14
5	1	2	3	4	5	6	7	8	9	10	11	12	13	14
6	1	2	3	4	5	6	7	8	9	10	11	12	13	14
7	1	2	3	4	5	6	7	8	9	10	11	12	13	14
8	1	2	3	4	5	6	7	8	9	10	11	12	13	14
9	1	2	3	4	5	6	7	8	9	10	11	12	13	14
10	1	2	3	4	5	6	7	8	9	10	11	12	13	14
11	1	2	3	4	5	6	7	8	9	10	11	12	13	14
12	1	2	3	4	5	6	7	8	9	10	11	12	13	14
13		2	3	4	5	6	7	8	9	10	11	12	13	14
14	1	2	3	4	5	6	7	8	9	10	11	12	13	14
15	1	2	3	4	5	6	7	8	9	10	11	12	13	14

Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week

A- Employment																	
Serial no. of member	In addition to (NAME)'s main work, did (NAME) do any other work during the last week?	For each day worked during the past week how many hours did (NAME) actually work? Main: (M) Other: (O)															
	1- Yes																
	2- No																
A1	A31	A32															
		Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Total	
		Main	Secondary	Main	Secondary	Main	Secondary	Main	Secondary	Main	Secondary	Main	Secondary	Main	Secondary	Main	Secondary
1																	
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	
11																	
12																	
13																	
14																	
15																	

Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week

A: EMPLOYMENT		B: UNEMPLOYMENT																
Serial no. of member	At what age did (NAME) start to work for the first time in his/her life?	Was (NAME) seeking work during the last week? 1- Yes 2- No	Member's age (10 and above)															
			What steps did (NAME) take during the last four weeks to find work?															
			1. Went back to the labour office 2. Went back the civil service office 3. Applied to the employment office/mediator 4. Placed/answered job advertisements in newspaper 5. Applied directly to employers 6. Contacted continuously the employers by telephone 7. Submitted job application 8. Tried to obtain equipment, credit and/or a work place to establish his/her own business 9. Asked friend or relatives to find a job for him/her 10. Through looking for in the markets 11- Other 12- Nothing Skip to A38 Continue													Did (NAME) want to work during the last week?		
For interviewer: Skip to the question A41		For interviewer: • If the member's age is between 5-9 years, write down no. of answer and skip to A42 • If the member's age is 10 and over: and If the answer is Yes, write down (1) and continue, and If the answer is No, write down no. (2) and skip to A36		For interviewer: Circle around no. of appropriate answer/s Multiple answers are allowed													For interviewer: 1. If the answer is Yes, continue 2. If the answer is No, skip to the question A40	
A33	A34	A35													36			
1			1	2	3	4	5	6	7	8	9	10	11	12				
2			1	2	3	4	5	6	7	8	9	10	11	12				
3			1	2	3	4	5	6	7	8	9	10	11	12				
4			1	2	3	4	5	6	7	8	9	10	11	12				
5			1	2	3	4	5	6	7	8	9	10	11	12				
6			1	2	3	4	5	6	7	8	9	10	11	12				
7			1	2	3	4	5	6	7	8	9	10	11	12				
8			1	2	3	4	5	6	7	8	9	10	11	12				
9			1	2	3	4	5	6	7	8	9	10	11	12				
10			1	2	3	4	5	6	7	8	9	10	11	12				
11			1	2	3	4	5	6	7	8	9	10	11	12				
12			1	2	3	4	5	6	7	8	9	10	11	12				
13			1	2	3	4	5	6	7	8	9	10	11	12				
14			1	2	3	4	5	6	7	8	9	10	11	12				
15			1	2	3	4	5	6	7	8	9	10	11	12				

Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week			
B:UNEMPLOYMENT			
Serial no. of member	NAME's age (10 and above)		
	What is the main reason why (NAME) did not seek work during the last week?	If opportunity to work had existed, would (NAME) have been able to start work in the last week?	How long has (NAME) been out of work and seeking work?
	1. Found a job but waiting to start 2. Works seasonally 3. Tired of looking for work, believes no suitable work is available 4. Lacks employers' requirements (training, experience, qualification) 5. Does not know where to search for a job 6. Student (studying) 7. Family/parents/spouse does not allow 8. Engaged in household chores 9. On retirement, no need to work 10. Unable to work (illness, disability) 11. Too young for work 12. Other	1- Yes 2- No	
		For interviewer: 1. If the answer is Yes, write down (1) and continue 2. If the answer is No, write down no. (2) and skip to A40	1-Less than one month 2-From one to 3 months 3-From 4 to 6 months 4-From 7 to 13 months 5-From 13 to 24 months 6-More than two years
			For interviewer: Write down no. of appropriate answer and skip to the question A42
A1	A37	A38	A39
1	☐ ☐	☐	☐
2	☐ ☐	☐	☐
3	☐ ☐	☐	☐
4	☐ ☐	☐	☐
5	☐ ☐	☐	☐
6	☐ ☐	☐	☐
7	☐ ☐	☐	☐
8	☐ ☐	☐	☐
9	☐ ☐	☐	☐
10	☐ ☐	☐	☐
11	☐ ☐	☐	☐
12	☐ ☐	☐	☐
13	☐ ☐	☐	☐
14	☐ ☐	☐	☐
15	☐ ☐	☐	☐

Serial no. of member	Section III: Current Economic Activity Status of All Household Members (5 and above) during the last week	Section VI: Usual Employment Status of All Household Members (5 and above) during the last 12 months	
	During the last week	During the last 12 months of survey	
	Member's age (10 and above)	Was the work reported in A20, A24 and A25 (NAME)'s main employment during the past 12 months?	Did (NAME) engage in any work at least one hour during the past 12 months?
	Why was (NAME) not available or did not want to work? (Indicate the most important reason)		
		1. Found a job but waiting to start 2. Works seasonally 3. Tired of looking for work, believes no suitable work is available 4. Lacks employers' requirements (training, experience, qualification) 5. Does not know where to search for a job 6. Student (studying) 7. Family/parents/spouse does not allow 8. Engaged in household chores 9. On retirement, no need to work 10. Unable to work (illness, disability) 11. Too young for work 12. Other	
	For interviewer: Write down no. of appropriate answer and skip to A42.	For interviewer: 1-Yes, (write no. (1) and skip to (A47). 2-No, write no. (2) and skip to (A44)	For interviewer: 1-Yes, (write no. (1) and skip to (A44). 2-No, write no. (2) and continue
	A40	A41	A42
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			

Section VI: Usual Employment Status of All Household Members (5 and above) during the last 12 months

Serial no. of member	In the past twelve months, did (NAME) do any of the following activities, even for only one hour?										Main occupation	
	a- Practicing a small or big business (by himself/herself) or with partners, e.g (selling, making things for sale, repairing things, guarding cars, hairdressing, taxi's driver, practicing nursery and birth, communication center, barber, shoe shining, etc b. Do any work for a wage, salary, commission or any payment in kind (excl. domestic work)? Examples: a regular job, contract, casual or piece work for pay, work in exchange for food or housing c- Conducting the house works in cash or in kind payment. d- Helping unpaid in a household business of any kind e.g(selling household poruducts, making household poruducts for sale or exchange, cleaning the places of household poruducts work). e- Cultivating or harvesting agricultural products for sale or individual consumption e.g (looking after in agriculture, guarder the agricultural crops). f- Do any construction or major repair work on his/her own home, plot, or business or those of the household? g- Catch any fish, prawns, shells, wild animals or other food for sale or household food. h- Fetch water or collect firewood for household use. i- Producing any other type of productions for household e.g (cloths,etc). For interviewer: If any of answers: (Yes), write down no. (1) and skip to (A44) If all of answers (No) and age of member is less than 18 years, write down no. (2) and skip to (A48) OTHERWISE: If all answers are "No" and the age of member is more or equal 18 years, write down no. (2) and skip to the next member in the section IV of Part II.										Describe the main job/task (NAME) was performing during the last 12 months e.g. carrying bricks; mixing baking flour; harvesting grain or qat; etc.	
	A43										A44	
	a	b	c	d	e	f	g	h	i	Occupation/ Main Work	Code	
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												
13												
14												
15												

Section IV: Usual Employment Status of All Household Members (5 and above) during the last 12 months

Serial no. of member	Economic activity		Status in Employment		In each month during the past year did (NAME) work or have a job?																										
	Describe briefly the main activity i.e. goods produced and services rendered where (NAME) is working		During the last 12 months, which of the following best describe (NAME) 's work situation at his/her main work?																												
	<u>For example:</u> 1. Manufacture of soft drink and being packaged 2. Manufacture of cloths and strings The members who aren't working in any authority or establishment should be written the activity which they do in detail 1. Selling housing tools in retail 2. Wholesale vegetables 3. Paving and prinking the buildings		<u>Paid workers</u> 1-Workers in paid to the agriculture and fishing. 2-Workers in paid to the unagriculture and fishing. <u>Employers and workers for their own account (unpaid)</u> 3- Employer (own project with available users. 4-Working for his account (own project with unavailable users <u>Workers for nothing</u> 5-Ingaged in family business, farming, grazing and collecting firewood ... etc. 6-Unpaid working (Volunteers / Trainees).		<u>For interviewer:</u> After writing "X" in the relevant boxes, check the respondent's age. If the member's age is less then 18, skip to A48 Otherwise (if the age is 18 and over), go to the to the next household member in the Section IV																										
	A45		A46																A47												Total months in which member worked
	Activity	Code																	2009						2010						
					April	May	June	July	August	September	October	November	December	January	February	March															
1		_____		_____																											
2		_____		_____																											
3		_____		_____																											
4		_____		_____																											
5		_____		_____																											
6		_____		_____																											
7		_____		_____																											
8		_____		_____																											
9		_____		_____																											
10		_____		_____																											
11		_____		_____																											
12		_____		_____																											
13		_____		_____																											
14		_____		_____																											
15		_____		_____																											

Section V: Household Chores for Children aged (5-17) Years

During the past week did (NAME) do any of the chores indicated below for this household?

- 1- Shopping for household
2. Repairing any household equipment
- 3-Cooking
- 4-Cleaning utensils/house
- 5-Washing cloths
- 6-Caring for children /Old / Sicks
- 7-Other household chores

For interviewer: If any answer will be "Yes", write down no. (1) and continue, In case all answers will be "No", and IF (A17= YES), (A18=YES) or (A19=YES), write down no.(2) and skip to A50.

In case all answers will be "No", and IF (A17= NO), (A18=NO) or (A19=NO), write down no. (2), skip to the next member in the

Serial no. of member

1- Shopping for household		2-Repairing any household equipment		3-Cooking		4-Cleaning utensils/house		5-Washing clothes		6-Caring for children /Old/ Sicks		7-Other household tasks	
1- Yes	2- No	1- Yes	2- No	1- Yes	2- No	1- Yes	2- No	1- Yes	2- No	1- Yes	2- No	1- Yes	2- No

A48

1													
2													
3													
4													
5													
6													
7													
8													
9													
10													
11													
12													
13													
14													
15													

Section V: Household Chores for Children aged (5-17) Years

Serial no. of member	During each day of the past week how many hours did (NAME) do household chores?							
	For interviewer: (Record No. of hours of work for each day separately) If child was working: IF (A17= YES), (A18=YES) or (A19=YES) continue. If he/she wasn't, skip to next member in the Section VIII, Part II.							
	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Total
	1	2	3	4	5	6	7	8
	A49							
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
13								
14								
15								

Section VI: Perceptions/Observations of Parents/Guardians about Working Children (5-17) Years					
These questions are intended to solicit views from parents or guardians about children's work.. Therefore reference should only be made about children who were reported to be working					
Note:- Only for children aged (5-17)years and their answers in (A17=Yes, A18=Yes or A19= Yes), and (A7=1)					
Serial no. of member	What do you consider currently best for (NAME)?	What problem(s) does (NAME) face as a result of his/her work?	What are the main three reasons for letting (NAME) work?		
	1-Work for income 2. Assist family business 3. Assist with household chores 4-Attend school 5. Other (specify)	1-Injuries, illness or sick health 2-Poor degrees in school 3-Emotional harassment ((intimidation),scolding,insulting) 4-Physical beatings 5-Sexual abuse 6-Extreme fatigue 7-No time to play 8-No time to go to school 9-None	01-Support family income 02-Helping in pay family debt back 03-Helping in household enterprise 04-Learning skills 05-Schooling is not useful for future 06-School is too far/no school 07Cannot afford school fees 08-Child is not interested in school 9. Temporarily replacing someone unable to work 10-Preventing him/her from accompanying bad friends 11-Others		
	For interviewer: Write down no. of appropriate answer	For interviewer: Write down number of appropriate answer			
	A50	A51	A52		
			First reason	Second reason	Third reason
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Go to the 2nd part of the questionnaire to the household characteristics					

PART II: HOUSEHOLD CHARACTERISTICS												
Section VII: Housing and Household Characteristics												
In what type of dwelling does the household live?			What's the ownership status of this dwelling?			How many rooms are occupied in this dwelling by the household, except kitchen, bathroom and toilet ?			What's the size of dwelling in square meters?			
1- Private House/ Separate Home/ Villa. 2-Apartment. 3-Inhabited establishment. 4-Wood or iron clad shelter. 5-Hut. 6-Tent. 7-Other.			1-Owned by one of members of HH . 2-Owned by household . 3-Rent . 4-Waqf . 5- Subsidy by employer free of charge . 6-Other .						1-Less than 20 square metres . 2-From 20 to 39 square metres . 3-From 40 to 69 square metres . 4-From 70 to 99 square metres . 5-100 square metres and more .			
For interviewer: Write down the no. of appropriate answer in the box.			For interviewer: Write down the no. of appropriate answer in the box.						For interviewer: Write down the no. of appropriate answer in the box.			
B1			B2			B3			B4			
_____			_____			_____			_____			
Are any of the following facilities available to the household ?			What is the main source of energy ?			What's the main source of drinking water?			What's the main source of water in dwelling ?			
1-Inside dwelling inclusively used for household . 2-Inside dwelling and Joint . 3-Outside dwelling inclusively used for household . 4-Outside dwelling and Joint. 5-Not available .			1-Wood . 2-Coal . 3-Cerosine gas . 4-Gas . 5-Electricity . 6-Diesel . 7-Animal wastes . 8-Other .			1-General network . 2-individual network . 3-Cooperative net . 4-Buying by tanker . 5-Carring by bags from the source . 6-Other .			1-Artesian well . 2-Normal well . 3-Spring / Stream . 4-Covered tank . 5-Uncovered tank . 6-Dam . 7-Taditional method to collect the rain water 8-Other .			
For interviewer: Write down the no. of appropriate answer in the box.			For interviewer: Write down the no. of appropriate answer in the box.			For interviewer: Write down the no. of appropriate answer in the box.			For interviewer: Write down the no. of appropriate answer in the box.			
Kitchen	Bathroom	Toilet	Cooking	Heating	Lightening							
B5			B6			B7			B8			
_____	_____	_____	_____	_____	_____	_____			_____			
Has the household ever changed the place of residence? (Governorate/district/country)			In which governorate/ district/country was the last place of residence of the household ?			In which year did the household move to the present place of residence (write the appropriate year in box ?			What was the main reason for coming or changing to the present place of residence ?			
1-Yes, Write no.(1) and continue 2-No, Write no.(2) and skip to (13 B)									01- Job transfer . 02- Found a job . 03-Looking for work . 04-Looking for a better agricultural land . 05- Studies (Schooling/training) 06- Proximity to place of work. 07-Accommodation . 08-Social or political problem . 09-Health. 10-Other .			
For interviewer: Write down the no. of appropriate answer in the box.			For interviewer:write name of place ,and boxes below are left for office coding						For interviewer: Write down the no. of appropriate answer in the box.			
			Name of governorate	Name of district	Name of country (if abroad of Yemen)							
B9			B10			B11			B12			
_____			_____	_____	_____	_____			_____			

PART II: HOUSEHOLD CHARACTERISTICS

Section VIII: Household Socio-Economic Status

Does the household own any of the following:

For interviewer: Circle around the appropriate (No./s.) and write down the number in the appropriate box .
(multiple answers are allowed)

Description	No.	Description	No.	Does the household own any livestock? How Many?	
1- Automobile.....	[]	12- Computer	[]		
2- Tractor	[]	13- Sewing machine	[]	Description	No.
3- Motor-bike	[]	14- Satellite	[]		
4- Bicycle	[]	15- Telephone	[]		
5- Vehicle drawing by Animal	[]	16- Mobile phone	[]		
6- Television	[]	17- Radio	[]		
7- Refrigerator	[]	18- Conditioner	[]		
8- Recorder	[]	19- Electronic fan	[]		
9- Washing-Machine	[]	20- Iron	[]		
10- Oven	[]	21- Heater	[]	1- Camel	[]
11- Mixer/Mangle	[]	22- Vacuum cleaner	[]	2- Horse	[]
B13				B14	

Does the HH. own any land?	How many areas of land does the HH. own?			
1- Yes Write down no. (1) and continue	1- Lebna	7- Maad	13- Day work	19- M2
2- No Write down no. (2) skip to (17B)	2- A cane	8- Matirah	14- Day plow	20- Hosal
For interviewer: Write down the no. of appropriate answer in the box.	3- Hablh	9- An acre	15- Day telam	21- Donam
	4- Shakh	10- Hektare	16- Step	22- Baa square
	5- Damd	11- Matrah	17- Draw	23- Alsurah
	6- Rope	12- Saloq	18- Arm	24- Aldah
	For interviewer: Write down the no. of appropriate answer in the box.			25- Strike
	For interviewer: If you will use an additional questionnaire, mark (✓) in the box			
	Local measure unit	Area of land is good for agriculture	Area of land is not good for agriculture	Local measure unit in square metre
B15	B16			
[]	[]	[] [] [] []	[] [] [] []	[] [] [] [] [] []

Has the household been adversely affected by any problem (countrywide/communitywide) in the last 12 months?	What was the problem that household has been affected?
1- Yes Write down no. (1) and continue	Indicate the most important faced. For interviewer: Write down the no. of appropriate answer in the box.
2- No Write down no. (2) skip to (B19)	
For interviewer: Write down the no. of appropriate answer in the box.	
B17	B18
[]	[]

PART II: HOUSEHOLD CHARACTERISTICS

Section VIII: Household Socio-Economic Status

Has the household suffered a fall in income due to any of the following household specific problems in the last 12 months?

**For interviewer:- (Read the following options)
(Multiple answers are allowed)**

Even if only one answer is " Yes", write down no. (1) continue; in case all answers are " No", write down no. (2) and skip to B21.

1- Loss of job for any member of HH.	2- Bankruptcy the HH. Business	3- Illness or a serious accident of a working member of the HH.	4- Death of a working member of the household	5- Abandonment by the household head	6- Fire in the house/business/property	7- Criminal act by one of the household members	8- Land dispute	9- Loss of cash support or in-kind assistance	10- Fall in prices of products of the hh. business	11- Loss of harvest	12- Loss of livestock	13- Others
--------------------------------------	--------------------------------	---	---	--------------------------------------	--	---	-----------------	---	--	---------------------	-----------------------	------------

(1) Yes

(2) No

B19

☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐
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How was it possible for the household to overcome this hardship?

**For interviewer:- (read the following options)
(Multiple answers are allowed)**

Write down (no./s) the appropriate answers in the given boxes.
If the answer will be "Yes," write no. (1), if it will be no, write " No." (2) for each option

1- Financial assistance from government agencies	2- Financial assistance from NGOs/religious organisations/local community organisations	3- Financial assistance from relatives/friends	4- Took children out of school as could not afford it	5- Placed child(ren) in other household(s)	6- Additional work hours by household members	7- Sold property/used savings	8- Reduced HH expenditures	9- No serious impact	10- Other
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(1) Yes

(2) No

B20

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PART II: HOUSEHOLD CHARACTERISTICS

Section VIII: Household Socio-Economic Characteristics

Did any of the your household members have any outstanding loans or obtain a new loan during 12 months?		What was the main reason for obtaining a loan?	Where did the household obtain the loan from?	Was the debt paid back?
1- Yes 2- No	Write down (1) and continue. Write down (2) and skip to B28	1- To meet essential HH. Expenditures (buying food, learning children,ect). 2-To buy vehicle (Bike, motorbike, car) for HH member. 3- To buy / repair /build a house. 4- To meet the expenditures of health for HH. Members (drugs, duties of physician or hospital) 5- To meet the ritual expenditures (birth, funeral and wedding,ect). 6- To open a new business/expand in the business. 7- To pay previous loans..... 8- Other	1- Government..... 2- Bank/Credit card... 3- Credit /financial groups.... 4- Employer/ landowner.... 5- Supplier of merchandise, equipment or raw materials... 6- A friend/relative of employer/landowner..... 7- Individual borrowing..... 8- A friend/relative of borrower.....	1- Yes, Wholly 2- Yes, Partially 3- No
For interviewer: Write down the appropriate answer in the box		For interviewer: Write down the appropriate answer in the box	For interviewer: Write down the appropriate answer in the box	For interviewer: Write down the appropriate answer in the box. If the answer no. (1) ask the option A in B25,B26 If the answer no. (2 or 3)ask the option B in B25, B26
B21		B22	B23	B24

A- How was the debt paid back? B- How will the debt be paid back?	A- Was any child withdrawn from school? B- Will any child be withdrawn from school to pay the debt back?	Will the child/ children withdrawn from school be sent back to school after the debt situation improves?	What is the household's average monthly expenditure ? (in local currency, YR)
1- Cash, by borrowing money from someone else.... 2- Cash, by selling some of assets... 3- Cash, by getting income from work.... 4- Providing direct labour for the creditor by adult household member.... 5- Providing direct labour for the creditor by child household member 6- In kind..... For interviewer: Write down the appropriate answer in the box.	1- Yes, write no. (1) and continue. 2- May be, write (2) and continue. 3- No need to withdraw, write no. (3) and skip to (B28) For interviewer: Write down the appropriate answer in the box	1- Yes..... 2- May be.... 3- No.... For interviewer: Write down the appropriate answer in the box	
B25	B26	B27	B28

What are the sources of HH's income? (Multiple answers are allowed)						What is the household's average monthly income? (in local currency, YR)					
1- Employment/Job..... 2- Social transfers..... 3- Scholarship..... 4- Rent/property..... 5- Private transfers..... 6- Other											
For interviewer:-(Circle no. of the appropriate answer/ones)											
B29						B30					
1	2	3	4	5	6						

Skip to the 3rd part of the questionnaire of the children aged (5-17) years.

PART III CHILD QUESTIONNAIRE

Important note for interviewer: Ask every child (5-17) in the household

Section IX: Educational Attainment of All Children (5-17) Years

[illegible]

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section IX: Educational Attainment of All Children (5-17) Years

[illegible]

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section IX: Educational Attainment of All Children (5-17) Years

[illegible]

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section X: Current Activity Status of All Children (5-17)

[illegible]

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section X: Current Activity Status of All Children (5-17)

[illegible]

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section X: Current Activity Status of All Children (5-17)

Serial No. of Member	A- Economic Activity				
	Describe the main job/task (NAME) was performing e.g. carrying bricks; mixing baking flour; harvesting maize; etc.		Describe briefly the main activity i.e. goods produced and services rendered where (NAME) is working.		Children 10 - 17 years
					In addition to your main work, did you do any other work during the past week?
					1- Yes, write down no. (1) 2- No, write down no. (2) continue
*	C23		C24		C25
	Main Occupation	Code	Main Activity	Code	

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section X: Current Activity Status of All Children (5-17)

Serial No. of Member	A- Economic Activity															
	Children (10 - 17) years old															
	For each day worked during the For each day worked during the past week how many hours did you actually work? Main (M) Other (O)															
	For interviewer: Write down number of work hours in the boxes by days															
*	C26															
	Saturday		Sunday		Monday		Tuesday		Wednesday		Thursday		Friday		Total	
	M	O	M	O	M	O	M	O	M	O	M	O	M	O	M	O

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (10-17) Years

Section X: Current Activity Status of All Children (10 -17)

A- Economic Activity				
Serial No. of Member	During the past week when did you usually carry out these activities?	Where did you carry out your main work during the past week?	Status in Employment	What was the mode of payment for the last payment period?
	A- For all children including attending school:		For your main job/work were you a/an....?	
	1- During the day (between 6 a.m and 6 p.m).... 2- During the evening or at night (after 6 p.m). 3- During the day and the evening (for the entire day) 4- On the week-end.... 5- Sometimes during the day/the night....	1- Governemntal ministries, institutions or companies 2- Mixed institutions or companies 3- Private institutions or companies 4- Shops/ workshop/ offices 6- Footpath kiosk in the market 7- Hawker.....	1- 1-Workers in paid for the agriculture and fishing. 2-Workers in paid to the non-agriculture and fishing. 3- Employer (his/her own business with employees..) 4-Own account worker (his/her own business without employees.....) 5-Ingaged in family business, farming, grazing, collecting firewood ..etc. 6- Unpaid working (Volunteers Trainees)	1- Piece rate 2- Hourly 3- Daily 4- Weekly 5- Monthly 6- Upon completion of task. 7- Other
	B- For children attending school only (if C5 =Yes):			
	6- After school..... 7- Before school..... 8- Before and after school.... 9- On the week-end..... 10- During missed school hours/days.....	8- Building and construction location (not affiliated to institution) 9- Farm/meadow (not affiliated to institution) 10- Transport means (not followed to institution) 11- Other place wasn't previously mentioned....	continue Skip to (C31) Skip to (C34)	
	For interviewer:- (write down no. of appropriate answer)	Write down no. of appropriate answer		For interviewer:- (write down no. of appropriate answer)
*	C27	C28	C29	C30
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* For who will answer the status (5 or 6) in C28 for the children in age (5-17) years, he/she must complete the section IV (household tasks) of (C44, C45, C46).

PART III CHILD QUESTIONNAIRE

Important Note for Interviewer: Ask Every Child in Household Age (10-17) Years

Section X: Current Activity Status of All Children (10-17)

Serial No. of Member	A- Economic Activity			B- Job Search	
	What's your average monthly income from the main work?	What do you usually do with your earnings?	Why do you work?	Were you seeking work in the last week?	At any time during the past 12 months did you engage in any work?
		1. Giving all/part of money for my parents/guardians 2. Employer gives all/part of my money for my parents or guardians 3. Pay my school fees 4. Buy things for school/for study 5. Buy things for the household 6. Buy things for myself 7. Save 8. Other	1. Supplement family income 2. Help pay family debt 3. Help in household enterprise 4. Learning skills 5. Schooling not useful for the future 6. School too far 7. Cannot afford the expenses of school 8. Not interested in school 9. To temporarily replace someone unable to work	1- Yes 2- No	1- Yes 2- No
				<u>For interviewer:</u> 1- Yes, Write down no. (1)	<u>For interviewer:</u> 1- Yes, Write down no. (1) and continue
		Write down no. of appropriate answer	Write down no. of appropriate answer and skip to C36	2- No, Write down no. (2)	2- No, Write down no. (2) and skip to (C44)
*	C31	C32	C33	C34	C35

PART III CHILD QUESTIONNAIRE

Important Note for Interviewer: Ask Every Child in Household Age (5-17) Years

Section XI: Health and Safety Issues about working children (5-17)

[illegible]

PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section XI: Health and Safety Issues about working children (5-17)

Serial No. of Member	Think about your most serious illness/injury, how did this/these affect your work/schooling?	Think about your most serious illness/injury, what were you doing when this happened?		Do you carry heavy loads at work?	Do you operate any machinery/heavy equipment at work?	What type of tools, equipment or machines do you use at work?	
	1- Not serious - did not stop work/ schooling 2- Stopped work or schooling for a short time 3- Stopped work or school completely .. 4- Caused to permanent disability <u>For interviewer:</u> Write down no. of appropriate answer			1- Yes 2- No <u>For interviewer</u> 1- Yes, Write down no. (1) 2- No, Write down no. (2)	1- Yes 2- No <u>For interviewer</u> 1- Yes, Write down no. (1) and continue 2- No, Write down no. (2) and skip to C42	<u>For interviewer:</u> Write down 2 machines mostly used	
		<u>For interviewer:</u> Write down the character of work or occupation Field of code is left for office works					
*	C37	C38		C39	C40	C41	
		Job task	Code			Type of instrument (machine)	Code
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PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section XI: Health and Safety Issues about working children (5-17)

Serial No. of Member	Are you exposed to any of the following at work?													
	<u>For interviewer:</u> Read out each of the following options for respondent one by one													
	Write down no. (1) if the answer will be "Yes" and no. (2) if the answer will be "No" for each below and with each member separately.													
	1- Dust, Fumes	2- Fire, Gas, Flames	3- Loud noise	4- Extreme cold, extreme heat or humidity	5- Dangerous tools (knives, etc.)	6- Work underground (mines, sockets, all works related in the extracting of the metals, stones, etc.)...	7- Work at heights	8- Work in water/ sea/ lake/pond/ river	9- Workplace too dark or confined	10- Insufficient ventilation	11- Chemicals (pesticides, glues, etc.)	12- Explosives	13- Spray of the agricultural insecticides and Manures	14- Other (specify)
*	(1) Yes (2) No C42													
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PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section XI: Health and Safety Issues about working children (5-17)

Section XII: Household Tasks of Children (5-17)

Serial No. of Member	Have you ever been subject to the following at work?					During the last week did you do any of the tasks indicated below for this household?							
	For interviewer: (Read out each of the following options one by one for respondent). Write down no. (1) if the answer will be "Yes" and no. (2) if the answer will be "No" for each below and with each member separately.					For interviewer: (Read out each of the following options one by one for respondent). Write down no. (1) if the answer will be "Yes" and no. (2) if the answer will be "No" for each below and with each member separately.							
						If there is any answer "Yes", continue with child, otherwise, skip to C47							
	1- Constantly shouted at	2- Repeatedly insulted	3- Beaten/physically hurt	4- Sexually abused (touched or done things to you that you didn't want)	5- Other, (specify).	1. Shopping for household	2. Repair any household equipments	3. Cooking	4. Cleaning utensils/ house	5. Washing clothes	6. Caring for children/old/sick	7. Other household tasks	
	(1) Yes, (2) No C43					(1) Yes, (2) No C44							
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PART III CHILD QUESTIONNAIRE

Important Note for interviewer: Ask Every Child in Household in Age (5-17) Years

Section XII: Household Tasks of Children (5-17)

[illegible]

23 - Result of Visit									
Interviewer's visit	1- Completed	2- Partially Completed	3- There was not a knowledgeable member in the HH. To respond the data	4- Whole HH. Was absent	5- Visit was delayed	6- Rejected	7- Dwelling is empty.	8- Dwelling was destroyed or eliminated	Visit's date
First									2010/ /
Second									2010/ /
Third									2010/ /

Names of working staff in survey by Job title:

1 -Field:

Stage	Job Title	Name	Worker No.	Signature
Field work	Enumerator			
	Team leader			
	Supervisor			

2 - Office work :

Stage	Job Title	Name	Worker No.	Date of office and computing accomplishment				Signiture
Office coding	Office coder			Day	Month	Year		
	Coding group leader			Day	Month	Year		
Input	Data Input			Day	Month	Year		
	Hand corrector			Day	Month	Year		
	Correction input			Day	Month	Year		

Central Statistical Organization (CSO) of the
Republic of Yemen

Harat Bi'r Abu Shamlah
Sana'a, Yemen

Tel.: +967 733 414 374

www.cso-yemen.org

International Programme on
the Elimination of Child Labour (IPEC)

ILO Regional Office for Arab States
ARESCO Centre Justinien Street - Kantari
PO Box 11-4088 Beirut, Lebanon
Riad Solh - Beirut 11072150
Tel.: +961 1 752 400; Fax: +961 1 752 405

www.ilo.org/beirut - www.ilo.org/ipec

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