

# Rapid Review 2

# The challenges of child labour research: data challenges and opportunities

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## **About ACHA:**

The research informing this Rapid Review as well as its publication was made possible thanks to the Foreign, Commonwealth & Development Office (FCDO)-funded research on Action on Children's Harmful Work in African Agriculture (ACHA). The aim of the programme is to build evidence on:

- the forms, drivers, and experiences of children's harmful work in African agriculture; and
- interventions that are effective in preventing harm that arises in the course of children's work.

It is currently assumed that the majority of children's work in Africa is within the agricultural sector. However, the evidence base is very poor in regard to: the prevalence of children's harmful work in African agriculture; the distribution of children's harmful work across different agricultural value chains, farming systems and agro-ecologies; the effects of different types of value chains and models of value chain coordination on the prevalence of harmful children's work; and the efficacy of different interventions to address harmful children's work. These are the areas that ACHA will address.

ACHA is a collaborative programme led by the Institute of Development Studies (IDS), Brighton, UK. Partners include:

- University of Ghana, Legon
- University of Development Studies, Tamale
- African Rights Initiative International (ARII)
- University of Sussex
- University of Bath
- University of Bristol
- Fairtrade Foundation
- ISEAL Alliance
- Rainforest Alliance
- Food Systems Planning and Healthy Communities Lab, University at Buffalo
- International Cocoa Initiative (ICI)
- Sustainable Trade Initiative (IDH).

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and **Dr James Sumberg**.

# **About this report:**

This paper is an attempt to instigate a broader discussion on children's work in sub-Saharan African countries by considering other dimensions of the subject area beyond the traditional definitions and scope provided in the child labour literature. Specifically, the review aims to determine whether a re-analysis of existing data sets on children's work is likely to yield new insights into the forms, prevalence and drivers of children's work in agriculture in Ghana.

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# **Acronyms**

ACHA Action on Children's Harmful Work in African Agriculture

**CLMRS** Child Labour Monitoring and Remediation System

FAO Food and Agriculture Organization of the United Nations

**GLSS** Ghana Living Standards Survey

**GSS** Ghana Statistical Service

ICI International Cocoa Initiative

**ILO** International Labour Organization

MICS Multiple Indicator Cluster Survey

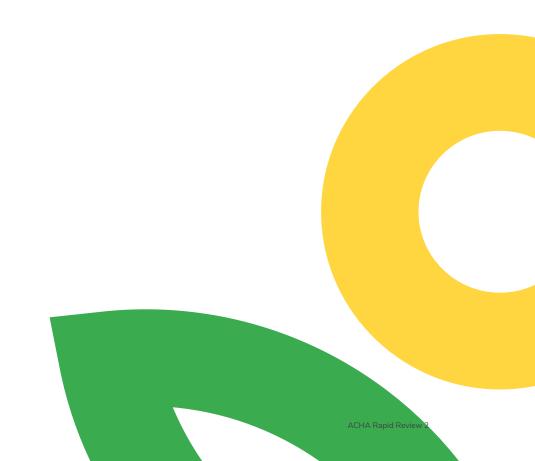
NPECLC National Programme for the Elimination of Worst Forms of Child Labour in Cocoa

SDG Sustainable Development Goal

**STCP** Sustainable Tree Crops Programme

**UN** United Nations

UNESCO United Nations Educational, Scientific and Cultural Organization



## 1 Introduction

The agricultural sector in most African countries is characterised by high levels of children's involvement in various aspects of the agricultural value chain. According to the International Labour Organization (ILO), about 71 per cent of child labour activities are found in the agricultural sector, comprising both subsistence and commercial farming (ILO 2017). The remainder are in the services (17 per cent) and industrial sectors (12 per cent). According to the Food and Agriculture Organization of the United Nations (FAO), child labour in the agricultural sector has been shown to have deleterious effects on children as well as on the future of agricultural systems as it perpetuates rural poverty (FAO 2018). Estimates from the ILO suggest that although most African governments have taken strong actions to combat child labour, between 2012 and 2016, the prevalence of child labour increased within the region. Similarly, disaggregated data indicate that child labour in agriculture increased from 59 per cent in 2012 to about 71 per cent in 2016, compared to an increase from 7 per cent to 12 per cent recorded in the industrial sector. These statistics show that the prevalence of child labour is particularly high in the agricultural sector despite the numerous programmes and strategies that have been implemented over the years to reduce the phenomenon.

In the fight against child labour, existing studies and policymakers have concentrated more on commercial crops and global supply chains, including cocoa, coffee and tea. There has been very little research on the harmful work by children in small-scale and subsistence agricultural activities, including farming, forestry and fishing. Given the complexity of the causes of child labour, there have been calls for a more holistic approach to tackling the problem if significant progress is to be made in eradicating children's harmful work. Rather than having various isolated and disjointed policies and programmes by various stakeholders, there is a need to develop a comprehensive multisectoral approach that integrates policies and strategies across various sectors of the economy. Dealing with the problem effectively requires a synchronisation of programmes in agriculture and food security, poverty reduction and social protection as well as youth development.

One of the challenges that has worked against a concerted effort in mitigating child labour is the lack of consensus in the conceptualisation of child labour and its related variants. Although most countries in Africa have ratified the ILO conventions on child labour, there is a lack of consensus on the appropriate ages for measuring child labour. This presents particular challenges in cross-country research as well as comparisons with global

estimates. For example, while most United Nations (UN) statistics focus on children aged 5–17 years, other common age categories in country studies include 5–11 years and 5–14 years.

Another source of dissent in the child labour literature is differences in the definition of child labour. While most statistics on child labour rely on survey instruments to capture marketable labour activities, other sources of estimates completely ignore household work that can be marketed. In most cases, concepts have been used interchangeably to capture child labour. Concepts such as child labour, child work and harmful work have all been used to capture aspects of child labour, although differences exist in the definition of these concepts. These discrepancies hinder the necessary synchronisation and coordination of programmes and policies to mitigate child labour in the agricultural sector and on the African continent.

This Rapid Review is an attempt to instigate a broader discussion on child labour by considering the various dimensions and angles associated with the phenomenon beyond the straitjacket definitions provided in most reports. Its objectives are threefold. First, it aims to determine whether re-analysis of existing data sets is likely to yield new insights into the forms, prevalence and drivers of children's work in agriculture in Ghana. Second, it aims to provide specific guidance on how these re-analyses might be undertaken and framed. And third, it aims to determine whether any of the available data sets might be used to map the number or density of children to the main agro-ecological zones or agricultural systems. In doing this, the review describes the nature of child work in the agricultural sector, highlighting areas that have often been ignored in the literature. The conclusion offers suggestions for future research on child labour based on our renewed understanding of the broad concept of child work.

The review is structured as follows. Section 2 provides a brief description of the Action on Children's Harmful Work in African Agriculture (ACHA) programme and discusses its main objectives. Section 3 provides some background information on child labour in Ghana, while section 4 provides a discussion of how Ghana defines child labour and children's harmful work. Section 5 provides a brief discussion on the empirical evidence on the drivers, prevalence and impacts of child labour in Ghana. Section 6 discusses data limitations. Sections 7 and 8 provide a discussion on the re-examination of child labour and ideas for future research on child labour and children's work. Section 9 concludes the review.

# 2 The ACHA programme

ACHA was borne out of the desire to provide new, robust and action-oriented evidence relating to children's harmful work. This much-needed evidence is required for effective policymaking to mitigate and completely eradicate harmful work for children, particularly in the agricultural sector. One of ACHA's objectives, therefore, is to provide an enhanced understanding of the socioeconomic and cultural dimensions of children's harmful work. These aspects of children's harmful work, which are often neglected in the literature, may have contributed to the slow pace of mitigating the issue in Africa's agricultural value chains. The renewed focus on child work and children's harmful work through the ACHA programme resonates with Sustainable Development Goal (SDG) 8.7, which aims to:

...take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms. (UNDESA n.d.)

The programme's initial focus is on a number of value chains in Ghana, a couple of which have had

less attention in the literature. These value chains include shallot production along Keta Lagoon and inland fishing activities along Lake Volta. By way of design, the ACHA programme relies on the expertise of researchers and international value chain expertise from various institutions that make up a consortium, which is expected to implement the programme. Membership of this consortium includes international agricultural value chain organisations such as the Fairtrade Foundation and the International Cocoa Initiative (ICI) as well as academic institutions and universities, including the Institute of Development Studies (IDS), the universities of Bristol and Bath, among others. Consortium members from Africa include the University of Ghana, the University for Development Studies and African Rights Initiative International.

ACHA's methodology seeks to harness the benefits of multidisciplinary research methods, which combine both quantitative and qualitative techniques. The programme will also emphasise participatory methods that allow the creation of evidence that is based on children's perspectives – an aspect of the evidence-generation process that is often missing in the literature.

### 3 Context

# 3.1 Overview of child labour in Ghana's agricultural sector

Although families in Ghana have always relied on some assistance from children in their households for various forms of farm work, it was not until the 1930s that the employment of child labourers to work on cocoa plantations became popular (Asamoah et al. 2018). The cocoa boom at the time necessitated the expansion of farms and the need for extra hands. Children – particularly those from low-income families – were a cheaper labour alternative (Hamenoo, Dwomoh and Dako-Gyeke 2018; Adeborna and Johnson 2015). Since this period, the engagement of children in agriculture has expanded and been increasingly adopted in the fishing industry.

Child labour, although largely discouraged and frowned on in Ghanaian law (Article 560, 1998; Sec. 89), persists in various sectors of the economy (GSS 2019; ILAB 2018; Zdunnek et al. 2008). Currently, about 88.6 per cent of children are engaged in some form of economic activity for

personal or family earnings, or some form of profit. These children constitute 29.2 per cent of the total labour force in Ghana (GSS 2019). The agricultural sector alone engages about 73.9 per cent of the estimated 7.1 million children (including children as young as five years) who are actively employed in various forms of work across the country (ibid.). Many of these children have been trafficked to work on cocoa and other cash crop plantations, among other forms of exploitation (ILAB 2018).

According to Ghanaian law, nine years of basic education plus two years of kindergarten education is mandatory and free for all children (ibid.). However, many children engaged in active work remain out of school (UNESCO 2018). An estimated 25.3 per cent of child workers aged 7–14 combine work with schooling, and only 95.2 per cent of these complete primary education (ibid.). Besides being denied proper education, nutrition and health care, it is commonly believed that many children who engage in labour activities have little or no time to play and are unduly exploited in the labour trade (Kudjonu 2016).

# 3.2 Prevalence and distribution of child labour in Ghana's agricultural sector

The widespread use of child labour across Ghana remains high (GSS 2019), especially in the agricultural sector. While 34.1 per cent of working children (5–14 years) in urban areas are engaged in the agricultural sector, 87.6 per cent of rural working children of the same age group are engaged in agriculture (ibid.). Notably, fewer girls (63.7 per cent) are employed in skilled agricultural activities compared with boys (82.8 per cent). Also, while a large proportion (94.4 per cent) of child workers work 40 hours or less per week, nearly 5.6 per cent of them worked more than 40 hours each week on average. Whereas no child in the Greater Accra region was reported to have worked more than 40 hours a week, 10.3 per cent of children in the Northern region reported working for more than 40 hours a week. Also, in Brong Ahafo (one of the country's major cocoa farming regions), approximately 7.8 per cent of children were reported to be working more than 40 hours a week (GSS 2019).

# 3.3 Forms of child labour in Ghana

For Ghanaian child workers, the usual forms of agricultural labour include: clearing land; collecting cocoa pods with harvesting hooks; breaking cocoa pods; working directly with or in the vicinity of pesticide spraying; and carrying heavy loads of water, seeds and agricultural produce (ILAB 2018). Some also act as scarecrows or herd livestock, hunt animals, and work in slaughterhouses, while others fish, prepare baits, repair nets and fishing gear, and launch, paddle and drain canoes (ibid.). Unfortunately, children working in agriculture risk being exposed to multiple types of hazardous work (School of Public Health and Tropical Medicine 2015). Child-fishermen endanger their lives during the course of their work, as they dive for fish, cast and pull fishing nets, and detangle nets underwater (ILAB 2018). Also, farmhands risk their health through use of poisonous chemicals that are detrimental to children's health and use of machetes and cutlasses for weeding; they also suffer poor skeletal development from carrying heavy loads (Asamoah et al. 2018; Carter and Roelen 2017).

# 4 Evaluation of existing data and evidence

# 4.1 Definitions: child labour, child work and children's harmful work

Children's participation in the labour market, as well as housework, is considered a central part of the socialisation process in many African countries (Krauss 2013). In most instances, the types of work that children are expected to do are determined by the social and cultural organisation of the community, which usually defines children's obligations. As a result, what is seen as children's work may vary from one country to another based on different social and cultural norms. However, formal definitions of child work, constructed from national surveys and international organisations involved in the field, are somewhat restricted and do not consider the socio-cultural dimensions of the phenomenon. These socio-cultural differences may explain the lack of consensus in the definition of child labour in the literature.

When conducting research in the area of child labour and children's harmful work, it is important

to bear in mind that not all work undertaken by children is inimical to their development. Indeed, work that does not impede children's development is considered positive as these kinds of activities provide children with useful skills and experiences that make them more productive and responsible adults in the future. In the literature, however, the terms 'children's work'. 'child labour' and 'children's harmful work' have been used interchangeably. Although the ILO's definition of these concepts tries as much as possible to distinguish between them, empirical work struggles to isolate the differences. According to ILO Convention No. 138 (C138), children's work refers to all types of paid and non-paid economic activity, including the production of goods for own (household) use or domestic work outside the child's household. Domestic work performed within the child's household is not regarded as economic activity. Within this Convention, the operational expression is 'economic activity', and the ILO stipulates specific minimum ages for different categories of work. However, it allows countries the flexibility to define

the minimum age for light work that is meaningful in their specific country context.

The minimum age for light work is set by the ILO at 13 years while ordinary work and hazardous work is set at 15 years and 18 years respectively. Based on these provisions, child labour is defined as work that is done by children who are younger than the stipulated minimum ages in the various work categories. How, then, do we treat children who meet the required minimum age for doing different categories of work but whose workloads are excessive and interfere with their education or health? Would this be considered child labour? According to the ILO, this would constitute child labour. Yet the complication with this definition is that merely meeting the minimum age of the various categories of work does not fully capture the harmful aspect of the child labour phenomenon. In addition to the minimum age requirement, C182 (which refers to the ILO convention on the worst forms of child labour) adds another layer of protection to children by describing the worst forms of child labour, classed as children's harmful work, which is defined as work that exposes children to various types of risks, including to the child's safety, moral development, and physical and mental health.

These definitions, based on ILO Convention 138, highlight a couple of challenges in empirical work on child work and children's harmful work. The first is the issue of excluding domestic or housework (including chores such as cleaning, fetching firewood and water, and caring for other family members whether younger siblings, older relatives or those who are ill) from the definition of child work. Given the emphasis that is placed on economic activity, child labour does not regard domestic or housework as an economic activity. C138 does not prohibit children from doing household chores as long as it does not interfere with their schooling and is not undertaken for long hours. However, it does not stipulate what constitutes 'long hours'. This makes the definition vague and challenging to capture in a survey instrument, leading most countries to exclude this from their definition of child labour completely. This exclusion is problematic as it ignores instances where excessive hours of house chores performed by children have the potential to harm their physical, emotional and mental wellbeing. Asserting that a child who works long hours within their home is not considered to be working because housework is not considered as economic activity is difficult to justify. In Ghana's definition and measurement of child labour, as shown in the Ghana Living Standards Survey (GLSS) Round 6, the Ghana Statistical Service (GSS) ignores housework, although there is evidence of children, particularly young girls, who may be exposed to harm due to the long hours they spend doing domestic chores.

This exclusion may lead to an underestimation of child labour and children's harmful work.

Second, the flexibility allowed in C138 presents a challenge for the standardisation of a definition to be used for comparative research, even within sub-Saharan Africa. Minimum age is defined differently by different countries. The flexibility in the C138 clause allows developing countries to set a minimum age of 14 years, which means that the minimum age for light work may be from 12 or 13 years. As a result, the minimum age for light work (for example) differs from country to country. According to the respective national statistical offices, the minimum age for light work in Ghana and Kenya is 13 years, 12 years in Nigeria and 14 years in Malawi. Also, national legislation is required to set the conditions for light work, which has not been done in most countries. Therefore, what may be considered light work in one country may not be necessarily considered as such in other countries. This makes it difficult to conduct crosscountry research on the phenomenon.

Again, C138 allows countries to exclude certain categories of work from the definition of harmful or hazardous work. For developing countries in particular, it allows them to exclude some branches of economic activity. For instance, family farms producing goods for local consumption without regular hired labour are exempt. Given the potential for children to be exposed to harm through exposure to agricultural chemicals and the use of some potentially harmful tools, even for subsistence farming, excluding such activities may ignore a substantial group of child labourers and, therefore, underestimate its incidence and prevalence. Also, countries that have ratified the Convention are required to develop country-specific hazardous worklists, though not all countries may have such a list. Ghana, through the Ministry of Employment, has developed a comprehensive hazardous work framework that details the various potential hazards for each sector, including agriculture. Having this list in place guides the categorisation of children's harmful work, especially in the agricultural sector.

As a result of the challenges discussed here, and the associated difficulties for empirical work in operationalising the ratified conventions, most national statistical offices and researchers often rely on more simple and straightforward definitions that can be captured in a questionnaire through a series of questions and indicators. For example, the most commonly used definition of child labour is children engaged in wage employment or children that are economically active. Most often, the emphasis in the definition appears to be on the minimum age required for employment, with less attention to the harmful aspect of children's work.

# 4.2 Challenges of measuring children's work using the GLSS

Subsequently, I discuss how the GSS has defined child work and children's harmful work since the country ratified the Convention. According to the GLSS Round 6 report on child labour (GSS 2014), children are considered to be engaged in child labour if they are doing hazardous work or economic activity below the minimum age for the various stipulated categories of work. Furthermore, hazardous work (according to the same report) includes: children working in designated hazardous industries (mining, quarrying and construction); hazardous occupations (with details in the list of hazardous work established by the national legislation); working long hours (that is, at least 42 hours per week); working under hazardous conditions such as night work; and being in an unhealthy work environment. For children under 18 years working in agriculture, undertaking activities such as clearing of forest or felling trees, bush burning or working with agrochemicals is considered to be dangerous to the child's wellbeing. In aquaculture, children's engagement in activities such as directing canoes to avoid tree stumps when travelling on water, throwing an anchor to stabilise canoes or diving into deep water to disentangle nets from tree stumps are considered to be hazardous.

Clearly, based on the definitions and parameters described earlier, the GSS distinguishes between child work, child labour and children's harmful work. However, most empirical studies on child labour or children's harmful work in Ghana have continued to rely on the minimum age stipulations. So far, the operationalisation of this definition – particularly for rigorous econometric and quantitative analysis – has proved to be challenging. The GLSS (rounds 5, 6 and 7) data, which were collected in 2005/06, 2012/13 and 2018/19, are the main nationally representative household surveys in Ghana that collect information on child labour. Such surveys are conducted based on design-based techniques, which - according to Hanif and Ahmad (2010), Siddigi (2013) and Shabbir et al. (2020) – are deficient in capturing a socio-culturally nuanced phenomenon such as child labour. In child labourrelated studies that have made use of the GLSS. it is difficult to decipher whether or not children are working with hazardous materials or in a work environment that could be harmful to them, due to the structure of the questionnaire. Compared to the Multiple Indicator Cluster Survey (MICS) data, questions relating to children's harmful work are almost non-existent in the GLSS rounds 5, 6 and 7. In the GLSS Round 5, there were no specific questions relating to tools and equipment used by children and their exposure to harmful substances, although there were some questions on hours worked and the timing (either day or night) in GLSS rounds 6 and 7.

Although specific questions relating to the description of tasks were posed, responses seemed to have been aggregated so much that the essence of the questions aiming to identify harmful work was lost. For instance, from the survey, it is not possible to know the specific agricultural work undertaken by children. Based on the structure of the questionnaire and the nature of questions asked, therefore, it is difficult to undertake a detailed analysis of children's harmful work, especially in the agricultural sector, beyond the number of hours worked and the time that children worked. This constraint may explain why quantitative analysis using these nationally representative household surveys has relied on age restrictions rather than on actual activities that are considered harmful to children. The lack of such detailed information in the surveys does not permit one to directly undertake a mapping of the prevalence and forms of child labour and children's harmful work in Ghana's various agro-ecological zones. Rather, given that the data allow for a regional disaggregation of the phenomenon, extrapolations of agro-ecological zones could be made based on the regional distribution of child labour activities.

In Ghana, Krauss (2013) notes that child labour is viewed as part of growing up, particularly in rural and farming communities. Specific questions relating to child labour, such as type of activity undertaken, and questions that seek to distinguish between light work and 'adult' work, may be socially and culturally dependent. For instance, whether a young boy of 14 years in the northern part of Ghana would engage in what the academic literature considers to be child labour depends on whether he is his father's first-born son (or not). The family structure, therefore, is an important dimension of child labour dynamics (Siddigi 2013). However, the GSS, in measuring child labour, fails to capture its socio-cultural dimension. This serves to illustrate the fact that, in reality, the concepts of child labour and harmful work are more nuanced than can be captured by the national statistical services through a national household-level quantitative survey.

# 4.3 Methods: quantitative, qualitative, cross-sectional and panel data

With the above caveats in mind, in the academic literature the exploration of child labour and children's harmful work is mostly based on repeated cross-sectional general household surveys, as noted by Edmonds (2007). Most analyses, particularly by economists, have relied on these cross-sectional data to conduct econometric

analysis to aid policymaking. Using cross-sectional data for child labour-related studies may present some advantages. Such data allow researchers to capture the prevalence of child labour and harmful work at a specific point in time. They allow policymakers to gain a snapshot understanding of the distribution and the nature of child labour, which may spawn other in-depth studies to provide a deeper understanding of specific issues. Large, nationally representative cross-sectional surveys have shown that the incidence of child labour is more prevalent in the agricultural sector, and several in-depth studies have emerged as a result. For instance, studies of the cocoa sector (Bymolt, Laven and Tyszler 2018; National Programme for the Elimination of Worst Forms of Child Labour in Cocoa (NPECLC) 2007; Sustainable Tree Crops Programme (STCP) 2002a; 2002b) have dominated the academic literature. Limited, recent studies, such as Yeboah and Egyir (2020) and ILO-IPEC (2013), have also thrown more light on child labour and children's harmful work in other value chains such as that of shallots and fish in Ghana. using small-scale and value-chain specific crosssectional surveys. Nationally representative surveys such as the GLSS and MICS data have included employment and child labour modules respectively to collect data on issues related to working children. MICS data have some advantages over the GLSS data as the MICS asks precise questions relating to the harmful aspect of children's work. The MICS has specific questions on children's exposure to harmful gases and chemicals, as well as other working conditions that predispose children to be harmed by such work.

Contrary to the available evidence from crosssectional data, evidence on the dynamics of child labour and children's harmful work is rather limited (Edmonds 2007). In recent times there has been an increasing number of studies that have used panel data to analyse various aspects of child labour dynamics. For example, using data collected on the same children between the ages of 15–17 years in 2008/09 and again in 2013/14, the School of Public Health and Tropical Medicine (2015) examined the changing nature of child labour, including hazardous work, in cocoa-growing areas in Ghana and Côte d'Ivoire. In implementing the Child Labour Monitoring and Remediation System (CLMRS), the ICI followed children (both those engaged in child labour and those not engaged) for five years. Such panel data provide a rare opportunity to conduct a

robust examination of the dynamics of child labour over time, as well as its effects on the children themselves and their households (ICI 2015). For example, data from the two waves suggest that the increase in the number of working children in child labour and hazardous work in the cocoa sector is primarily explained by the increase in the number of households engaged in the sector in 2013/14 compared to 2008/09. Also, longitudinal data may allow the researcher to study the seasonality and changes in the types of child work and children's harmful work in agricultural communities, which is lost when cross-sectional data are employed.

The complementary nature of applying mixed methods has been emphasised in the recent academic literature. Particularly for studies on a socio-culturally nuanced phenomenon such as child labour and children's harmful work, the advantage of employing both quantitative and qualitative methods cannot be overemphasised. Findings from focus group discussions and in-depth interviews may be useful in validating findings from quantitative analyses. Also, qualitative results are critical in the interpretation of unexpected survey results. For example, analysis of qualitative data showing that schools are usually the targets of recruiters of child labour may be used to explain the unexpected finding that children enrolled in school are also more likely to work. Many studies in Ghana have employed both quantitative and qualitative methods in exploring issues on child labour. For instance, the NPECLC (2007) combined individual-, household- and community-level questionnaires with focus group discussions to investigate the worst forms of child labour in the cocoa sector in Ghana.

Similarly, the School of Public Health and Tropical Medicine (2015) and Bymolt et al. (2018) have employed mixed-method techniques to enhance our understanding of child work and children's harmful work in the cocoa sector. In the fishing sector, ILO-IPEC (2013) is an excellent reference. The use of quantitative data from either cross-sectional and/or panel data allows researchers to provide the descriptive-analytical work, highlighting the incidence, prevalence and distribution of both child work and children's harmful work. Although these analyses are critical for policymaking, they overlook the in-depth understanding of the nature and forms of child labour, which may vary from one sector of the economy to another.

# 5 Empirical evidence: prevalence, drivers and impacts of child labour

#### 5.1 Drivers and prevalence

Various studies on child labour, including Haider and Qureshi (2016), Dehejia and Gatti (2002) and Ravinder (2009), show that poverty, low incomes and a myriad of problems associated with schooling cause children to engage in work. According to the National Plan of Action for the Elimination of the Worst Forms of Child Labour in Ghana (2017-2021), known as NPA2, the main causes of child labour are underpinned by localised socioeconomic vulnerabilities in the context of growing inequalities, in spite of recorded progress in economic growth. Akaguri (2014) maintains that the rewards of child labour and the availability of work for children increase the opportunity cost of schooling and significantly increase children's involvement in economic activities. This is consistent with findings from Owusu and Kwarteye (2008), who explain that cocoa farmers often employ children for more extended hours when adult labour supply is reduced. Evidence on the drivers of child work includes poverty, low household incomes and lack of education. Using a mixed-method approach, Adam (2017) reports that poverty and low household incomes are the main causes of child labour in the Northern region of Ghana. Children's labour is considered a means of diversifying the income portfolios of these households.

Similar conclusions on poverty as the primary driver of child labour are also drawn by Djalalova (2015) and Abou (2019), who show that poverty and limited access to good education promote child labour in Ghana. Also, Odijie (2016) and Koomson and Asongu (2015) note that child labour in the cocoa sector in Ghana and Côte d'Ivoire is a consequence of decreasing profits on cocoa farming and increased poverty among cocoa farmers as the sector attains its productive limit. Due to the reduced income from cocoa farming, children from households engaged in cocoa farming augment the household's income by engaging in other economic activities. However, Krauss (2013) suggests that eliminating poverty may not eradicate child labour, as children from wealthy households are also found to be economically active. Using a national household survey, the author points to the perceived low returns to basic education - particularly in rural areas - as another cause of child labour. This assertation is also corroborated by Adam (2017), who finds that the lack of formal

education is a major cause of child labour in Ghana's Northern region.

Low levels of education among parents and children have been shown to influence child labour. Akaguri (2014) notes that the fee-free public basic education still leaves households with a considerable amount of educational expenses, which hinders access among children from poor households in Ghana. Also, Koomson and Asongu (2015) blame the perpetuation of child labour in Ghana on the government's education policies, highlighting their ineffectiveness in curbing the phenomenon. It is argued that a combination of educational policies and the low expected returns on education in rural areas encourage the involvement of children in economic activities rather than schooling.

According to the GSS (2014), one in ten children are engaged in the worst forms of child labour. 
The report further shows that apart from the Greater Accra and Central regions, the proportion of children engaged in child labour activities is about 20 per cent on average. The forms of child labour appear to be different in rural and urban areas of the country. In urban areas, child labour manifests in the form of children selling in the streets and begging, either for themselves or for others.

Also, girls are often engaged in carrying heavy loads (kayayei) in the local markets. In rural areas, however, child labour is mainly in agriculture, which includes livestock and fisheries.

Although it is known that many children combine school with work, data from the GLSS Round 6 suggest that about 60 per cent of children who are not in school are engaged in child labour, of which a significant proportion are engaged in hazardous work. According to the labour force report (GSS 2014), an estimated 1.9 million children are engaged in child labour. The highest incidence falls in the rural savannah zone, covering the three Northern regions, which records the highest rates of poverty. Similarly, Djalalova (2015) notes that while child labour is widespread in Ghana, its acceptance is more extensive in rural, poverty-stricken areas of the savannah, coastal and forest regions, where families cannot afford other essentials (such as uniforms, shoes, bags, and money for food) required to benefit from the government's free basic education programme. Furthermore, using data from the GLSS surveys for 1989/99 and 2005/06,

<sup>1</sup> In Ghana's context, worst forms of child labour include commercial sexual exploitation of children, forced labour in begging (on streets), working in agriculture (including herding and fishing), artisanal gold mining, hawking on the streets, carrying heavy loads in the markets, ritual servitude and domestic work.

Krauss (2013) shows that historically, the incidence of child labour has remained highest in the Northern regions compared to the Southern part of the country. According to the GLSS Round 4 report (GSS 2000), 28.2 per cent of children aged 7–14 years were economically active in the Northern part of the country, while about 26 per cent of the same age group were economically active in the Southern part of the country. Similarly, Krauss (2013) shows that 53.7 per cent of children aged 6–14 years who were not in school were engaged in child labour in the Northern part of Ghana, compared to 33.3 per cent of children the same age in the Southern part of the country.

#### 5.2 Impacts of child labour

Child labour can have both short-term and longterm impacts on the individuals involved as well as their households. These effects can be positive and negative. Beegle et al. (2008) demonstrated significant adverse effects of child labour on time spent in school, primary school completion rate and the marginal productivity of labour. In Ghana, Heady (2000) defined children's work to include both economic and non-economic activities (domestic work), while Hamenoo et al. (2018) define work as economic activity in their qualitative study exploring the link between child labour and its implications for children's education and health. Using different measures of child labour, both studies have shown that it negatively impacts children's educational attainment and progress, as children do not make time for school work and therefore have poor learning outcomes. However, Beegle, Dehejia and Gatti (2009) and Ilahi, Orazem and Sedlacek (2001) have pointed to the positive returns on experience, as they argue that while child work may interfere with hours spent in school, the work experience gained on the job may make up for hours spent out of school, as experience leads to higher earnings. Yet recent evidence by Lambon-Quayefio and Owoo (2018) shows the reverse to be the case in the Ghanaian context, which also shows that child labour is associated with low-skilled jobs in the future.

Other studies have also examined the impact of child labour on health and social outcomes. Agarwal (2017) asserts that child workers are at a higher risk of getting injured, being emotionally distressed or depressed, and ageing prematurely. The author also suggests they generally have low self-esteem, nutritional deficiencies and poor physical health. Particularly in the agricultural sector, Agarwal (ibid.) predicts increased risk of negative impacts on health outcomes as children are exposed to dangerous tools and equipment as well as toxic chemicals.

# 6 Data limitations and gaps

Several data limitations have been noted in studies relating to child work and children's harmful work. Shabbir et al. (2020) and Siddiqi (2013) have argued extensively about the limitations associated with the use of survey data (due to the design) for child labour studies. For many researchers, however, survey data remain an important source of data. The challenges involved with such data are discussed here.

First, when collecting survey data on children's activities, children are usually not the respondents. Household heads – often mothers or other adults – tend to be interviewed. In the GLSS (similar to the Living Standards Measurement Study), even though the questionnaire indicates children who are five years and above as respondents, the household head and other adults that are deemed to be knowledgeable are allowed to answer on behalf of the child. As a result, researchers miss the child's perspective entirely. With the MICS, children who are 15 years or older are interviewed directly with the consent of the parent or guardian. This means

that the survey only captures the perspective of children who are aged 15–17. The challenge here is the restricted information on working children who fall outside this age range.

Second, most surveys operationalise child labour as 'economically active' children. Definitions are often based on the legal minimum age stipulated for various kinds of work by the ILO conventions on child labour. This is a challenge that most national statistical offices in sub-Saharan Africa face, as there are usually some guidelines as to what is considered economic activity, which is typically used in computing national income. Such restricted definitions do not give a complete and true reflection of child work, as domestic or housebased work is ignored. In many households in sub-Saharan Africa, young children (mostly girls) may spend many hours doing domestic work and some activities that may expose them to harm. For example, young girls may inhale smoke from spending hours with their mothers during charcoal burning and shea butter processing. This may

lead to the underestimation of the prevalence or incidence of child labour and children's harmful work as the definition provided by the ILO suggests that any hazardous work is classified as child labour.

Moreover, the 'economically active' definition also constrains research on child work, with minimal scope for exploration of harmful work. The nature of the questions asked in the employment module of the GLSS makes it difficult to undertake any meaningful and detailed analyses of children's harmful work. In the GLSS rounds 5, 6 and 7, although questions were asked about how long (i.e. the total number of hours) children may have worked for, the time of day the activity took place, and which industry the job was in, no detailed follow-up questions were asked about specific activities that could be used to ascertain children's exposure to harm. In this regard, the MICS provides more detailed questions regarding harm, although not exhaustive.

Third, there are notable inconsistencies in the questions relating to child labour in the various surveys. In the Child Labour Survey conducted in 2001 (GSS 2003), the age bracket of interest was 5–17 years. However, in the GLSS Round 5 in 2005, questions relating to children's economic activity concerned those aged seven and older. In the GLSS rounds 6 and 7, the attention returned to children in the 5–17 years age bracket. Also, in the GLSS Round 5, there were no specific questions relating to the health and safety of working children

(i.e. injuries, exposure to harmful substances, time of day of work) although some general questions were introduced in GLSS rounds 6 and 7. Even in the most recent surveys (GLSS 6 and 7), there are still some inconsistencies in questions relating to child labour. In GLSS 6, there is an explicit question, 'At what age did [NAME] start to work for the first time in his/her life? (As regular or casual employee, self-employed, employer or unpaid family worker)'. In GLSS 7, however, this question was omitted entirely, and there are no detailed follow-up questions regarding children's exposure to harmful working environments. The inconsistencies in the questionnaire may present challenges when conducting trend analysis and making comparisons with other studies that seek to measure changes in child work and children's harmful work over time.

Fourth, none of the surveys contain detailed questions on child work and children's harmful work relating to specific sectors of the economy. The questions asked are all very general, limiting research that aims to investigate child work and harmful work in specific sectors, such as agriculture, where the phenomenon is known to be widespread. The GLSS thus limits studies relating to specific value chains such as cocoa, fishing, shea butter or shallot. Given this challenge, studies on various value chains have relied on project-specific surveys such as those conducted by the ICI, the KIT Royal Tropical Institute, and the School of Public Health and Tropical Medicine at the University of Tulane.

# 7 Re-examining child labour through a new lens

In response to the underwhelming progress in tackling child labour and its worst forms in sub-Saharan Africa, there is a need to re-examine the available evidence on child labour and children's harmful work from new perspectives. This will provide new insights for effective policymaking at both national and international levels. These new insights may be considered in light of the current challenges and limitations of existing data in child labour research.

A review of survey protocols about whom to ask questions relating to child labour and children's harmful work is a critical step if new insights into the phenomenon are to be obtained. The conventional practice is that household heads or parents are designated as the main respondents to questions relating to children's work. A re-examination of child labour from the child's

perspective may yield deeper insights into the phenomenon.

Also, particularly for children's harmful work in the agricultural sector, there is a need to collect information about specific activities within various value chains to deepen understanding of children's hazardous work in the sector. The ILO Convention on the Worst Forms of Child Labour allows each country to prepare its list of hazardous activities in each sector of the economy. Based on this, a list of tasks that are commonly undertaken by children in various value chains could be referred to during interviews and interactions with children during fieldwork. Understandably, this is likely to increase the time spent on interviews. However, this will deepen our understanding of the nature of activities undertaken and how long children engage in such activities.

In some instances, using the standard general household survey may not capture all children involved in child labour or hazardous work, as noted by Krauss (2013). This is because in some value chains (such as cocoa and the fishing sector), children are 'leased' for many years or sold completely to their 'owners' or 'masters'. On cocoa farms, for instance, Gregory (2013) reports that children are 'sold' to farm owners by relatives. These children often live on farm plantations in huts provided by their new 'owners', with restricted social contact (Robson 2010). Similarly, on Lake Volta, the International Justice Mission (IJM 2015) reports on the use of contractual agreements for exploitation between traffickers and families where the children involved live away from their homes. Again, general household surveys may not capture children with these living arrangements. Additional questions that probe how many children the parents have/had, and what those children are all doing now, may therefore be included to augment the usual household surveys to ensure that all children are accounted for.

There has been a worrying divergence in child labour estimates in the literature. This may be due to how child employment is defined, the timing of the survey, or the details covered, among other characteristics. Survey questions that tend to focus only on children's work on commercial farms may churn out estimates that ignore children's hazardous work on family farms that do not pay wages but at the same time expose children to

harmful agricultural substances. These peculiarities are evidence of the nuanced nature of child labour and children's harmful work. Following the critique of Siddiqi (2013) and Shabbir et al. (2020), reliance on a composite measure of child labour or children's harmful work in the agricultural sector may provide additional insights. Factor analysis could be undertaken to estimate children's harmful work in the sector based on questions regarding children's exposure to various harmful activities (as defined for the various sectors by each country). Higher loadings on exposure to toxic chemicals rather than the use of dangerous equipment (for instance) may indicate the nature of the harm that children are mostly exposed to in the agricultural sector.

To facilitate policymaking in the eradication of child labour, governments and policymakers must be aware not only of the short-term impacts but also the long-term effects of child labour. To examine these, however, researchers require current data on outcomes of interest, including economic and social outcomes as well as detailed data on people's participation in the labour force when they were children. Such data are, unfortunately, still quite rare (Congdon Fors 2012). In addition to assessing long-term effects, panel data allow researchers to capture the dynamics of child labour. With longitudinal data, researchers can provide evidence on how children transition from one type of economic activity to another, and the seasonality of child labour and children's harmful work in the agricultural sector.

## 8 Ideas for future work on child labour

Evidence from the literature, including studies such as Nishijima, Souza and Sarti (2015) and Nicolella and Kassouf (2018), has shown the effects of engaging in child work on health outcomes. These studies have shown that early labour market entry is associated with poor physical health in adulthood. With the dearth of studies in the literature, and particularly for the Ghanaian context, future research in this area could examine the effects of hazardous work on health outcomes of children involved in various kinds of work. Using detailed information on harmful work from the MICS 6 (2018) for Ghana, future studies may employ robust empirical techniques to examine the extent to which child labour affects children's health outcomes. Anthropometric measures, including weight-forage, height-for-age and height-for-weight, are the main health outcomes of interest. Also, future studies could go beyond minimum wage definitions

of child labour (as have widely been used in the literature) to include hours of work and harmful work in the definition of child labour. They could also consider the intensity of harmful work, which will be constructed based on a series of questions.

Child labour activities are most prevalent in rural and poor regions in Ghana (Djalalova 2015; Adeborna and Johnson 2015; Krauss 2013). At the same time, fertility rates are highest in rural parts of Ghana (Olatoregun et al. 2014). While it is accepted that poverty drives child labour, child labour productivity and income accrued to poor parents could also explain in part the high fertility rates experienced in these regions (Koomson and Asongu 2015). Consequently, parents' expectations of incomes from children's work result in high birth rates, which in turn aggravate poverty and drive children into work. Future work on child labour could explore this link using available data.

## 9 Conclusion

Child labour is a persistent and widespread phenomenon in many developing economies. In Ghana, child labour and children's harmful work is particularly predominant in rural areas in the agricultural sector, including the fishing industry. The available research on child labour in Ghana has mainly involved global value chains such as cocoa although there is some limited evidence available on the fishing industry. Over the years, various policies have been implemented to deal with the issue. Despite various policies and programmes, progress in tackling child labour and its worst forms has not been impressive. With the renewed interest in child labour and its worst forms through the Sustainable Development Goals, there is a need to re-examine and re-analyse available data to provide new insights for effective policymaking. This Rapid Review report has aimed to review the existing data and provide an assessment of a possible re-analysis of child labour in Ghana's agricultural sector.

Research on child labour in Ghana has relied primarily on household surveys such as the GLSS (produced by the Ghana Statistical Service) and the MICS (produced by UNICEF). In this report, I have

noted several challenges associated with nationally representative data on child labour. In relation to children's harmful work in the agricultural sector, in particular, the available data are not detailed enough for disaggregation and mapping of the density or prevalence of child labour in the various agro-ecological zones of the country. At best, the data only allow for a regional disaggregation of the prevalence of child labour.

A review of the survey methodology with regards to the main respondent to questions on child labour, specific questions asked on various harmful activities in the agricultural sector, and the use of a composite measure of child work and children's harmful activities may provide additional insights. Future research on child labour may consider investigating the welfare effects of children's harmful work, focusing on health and education outcomes. Evidence from a re-examination, based on the suggested reviews of measures and methodology, may provide the critical evidence required for policies that will curb child labour in the agricultural sector in Ghana as a whole.

## References

Abou, E.P. (2019) 'A Re-Examination of the Determinants of Child Labour in Côte d'Ivoire', International Journal of Economics and Financial Research 5.2: 26–35

Adam, I. (2017) 'The Perceived Causes and Effects of Child Labour on Children's Education: A Case Study of Shea Butter Processing Industry of Sagnerigu District of the Northern Ghana', thesis, Master of Education in Agriculture, University for Development Studies, Tamale

Adeborna, D. and Johnson, K. (2015) Child Labour Literature Review and Scoping Study Report, Narragansett RI: Coastal Resources Center, Graduate School of Oceanography, University of Rhode Island, Netherlands Development Organization and Friends of the Nation

Agarwal, S. (2017) 'Impact of Child Labour on the Nutritional Level and Developmental 9-12 Years', Journal of Textile Science and Engineering 7.3

Akaguri, L.A. (2014) 'Fee-Free Public or Low-Fee Private Basic Education in Rural Ghana: How Does the Cost Infuence the Choice of the Poor?', Journal

of Comparative and International Education 44.2: 140–61

Asamoah, P.; Adubofour, S.; Obodai, J. and Agyemang, F. (2018) 'The Use of Children in Cocoa Production in Sekyere South District in Ashanti Region, Ghana: Is this Child Labour or an Apprenticeship Training?', International Journal of Agricultural Research, Innovation and Technology 8.1: 38–43

Beegle, K.; Dehejia, R. and Gatti, R. (2009) 'Why Should We Care About Child Labour? The Education, Labour Market and Consequences of Child Labour', Journal of Human Resources 44.4: 871–89

Beegle, K.; Dehejia, R.; Gatti, R. and Krutikova, S. (2008) The Consequences of Child Labour: Evidence from Longitudinal Data in Rural Tanzania, Policy Research Working Paper 4677, Washington DC: World Bank

Bymolt, R.; Laven, A. and Tyszler, M. (2018) Demystifying the Cocoa Sector in Ghana and Côte d'Ivoire, Amsterdam: The KIT Royal Tropical Institute Carter, B. and Roelen, K. (2017) **Prevalence and Impacts of Child Labour in Agriculture**, K4D Helpdesk Report, Brighton: Institute of Development Studies (accessed 15 April 2021)

Congdon Fors, H. (2012) 'A Review of Recent Theory and Evidence with Policy Implications', Journal of Economic Surveys 26.4: 570–93

Dehejia, R.H. and Gatti, R. (2002) Child Labour: The Role of Income Variability and Access to Credit Across Countries, NBER Working Paper 9018, Cambridge MA: National Bureau of Economic Research

Djalalova, M. (2015) 'Child Labour Prevalence in Ghana', mimeo, KDI School of Public Policy and Management

Edmonds, E. (2007) 'Child Labor', in T. Schultz and J. Strauss (eds), Handbook of Development Economics, Amsterdam: Elsevier Science

FAO (2018) 'Child Labour in Agriculture Is On the Rise' 12 June, FAO website. Food and Agriculture Organization of the United Nations (accessed 21 April 2021)

Gregory, A. (2013) 'Chocolate and Child Slavery: Say No to Human Trafficking this Holiday Season', The Huffington Post, 31 October (accessed 21 April 2021)

GSS (2019) Ghana Living Standards Survey (GLSS 7) Main Report, Accra: Ghana Statistical Service

GSS (2014) Ghana Living Standards Survey Round 6 Child Labour Report, Accra: Ghana Statistical Service

GSS (2003) Ghana - Ghana Child Labour Survey – 2001, Accra: Ghana Statistical Service

GSS (2000) Ghana Living Standards Survey Round 4, Accra: Ghana Statistical Service

Haider, S.Z. and Qureshi, A. (2016) 'Are All Children Equal? Causative Factors of Child Labour in Selected Districts of South Punjab, Pakistan', New Approaches in Educational Research 5.1: 3–10

Hamenoo, E.S.; Dwomoh, E.A. and Dako-Gyeke, M. (2018) 'Child Labour in Ghana: Implications for Children's Education and Health', Children and Youth Services Review 93: 248–54

Hanif, M. and Ahmad, M. (2010) Design and Model Based Sampling Inference, Riga: Lambert Academic Publishing

Heady, C. (2000) What is the Effect of Child Labour on Learning Achievement? Evidence from Ghana, Innocenti Working Paper 79, Florence: UNICEF Innocenti Research Centre (accessed 22 April 2021) ICI (2015) ICI Synthesis and Review of the Final Tulane Report, Geneva: International Cocoa Initiative

IJM (2015) Child Trafficking Into Forced Labour on Lake Volta, Ghana: A Mixed Method Assessment, Washington DC: International Justice Mission

ILAB (2018) 2017 Findings on the Worst Forms of Child Labour, Washington DC: Bureau of International Labor Affairs, US Department of Labor

llahi, N.; Orazem, P. and Sedlacek, G. (2001) The Implications of Child Labor for Adult Wages, Income and Poverty: Retrospective Evidence from Brazil, Washington DC: World Bank

ILO (2017) Global Estimates of Child Labour: Results and Trends, Geneva: International Labour Organization

ILO-IPEC (2013) Analytical Study on Child Labour in Volta Lake Fishing in Ghana, Geneva: International Labour Organization-International Programme on the Elimination of Child Labour and Forced Labour

Koomson, I. and Asongu, S.A. (2015) Relative Contribution of Child Labour to Household Farm and Non-Farm Income in Ghana: Simulation with Child's Education, AGDI Working Paper 15/032, Yaounde: African Governance and Development Institute

Krauss, A. (2013) Understanding Child Labour in Ghana Beyond Poverty – The Structure of the Economy, Social Norms and No Returns to Rural Basic Education, World Bank Policy Research Working Paper, Washington DC: World Bank

Kudjonu, G. (2016) 'Newspaper Coverage of Child Labour: A Content Analysis of the Daily Graphic', thesis, University of Ghana

Lambon-Quayefio, M.P. and Owoo, N.S. (2018) 'Child Labour, Future Earnings and Occupation Choice: Evidence from Ghana', International Journal of Social Economics 45.12: 1590–1608

National Programme for the Elimination of Worst Forms of Child Labour in Cocoa (NPECLC) (2007) Labour Practices in Cocoa Production in Ghana (Pilot Survey), Accra: Ministry of Manpower, Youth & Employment

Nicolella, A. and Kassouf, A.L. (2018) 'The Effect of Child Labour on Children's Health in Brazil', International Journal of Social Economics 45.2: 357–71 (accessed 15 April 2021)

Nishijima, M.; Souza, A.P. and Sarti, F.M. (2015) 'Trends in Child Labor and the Impact on Health in Adulthood in Brazil from 1998 to 2008', Cadernos de Saúde Pública 31.5: 1071–83

Odijie, E.M. (2016) 'Diminishing Returns and Agricultural Involution in Côte d'Ivoire's Cocoa

Sector', Review of African Political Economy 43.149: 504–17

Olatoregun, O.; Fagbamigbe, A.F.; Akinyemi, O.J.; Yusuf, O.B. and Bamgboye, E.A. (2014) 'A Comparative Analysis of Fertility Differentials in Ghana and Nigeria', African Journal of Reproductive Health 18.3: 36–47

Owusu, V. and Kwarteye, A.G. (2008) 'An Empirical Analysis on the Determinants of Child Labor in Cocoa Production in Ghana', paper presented at PEGNet Conference, Assessing Development Impact – Learning from Experience, Accra, Ghana, 11–12 September 2008

Ravinder, R. (2009) 'The Child Labour in Developing Countries: A Challenge to Millenium Development Goals', Indus Journal of Management & Social Sciences 3.1: 1–8

Robson, P. (2010) Ending Child Trafficking in West Africa: Lessons from the Ivorian Cocoa Sector, London: Anti-Slavery International

School of Public Health and Tropical Medicine (2015) Final Report: 2013/14 Survey Research on Child Labour in West African Cocoa Growing Areas, New Orleans: School of Public Health and Tropical Medicine, Tulane University

Shabbir, M.S.; Siddiqi, A.F.; Kassim, N.M.; Mustafa, F. and Salman, R. (2020) 'A Child Labour Estimator: A Case of Bahawalpur Division', Social Indicators Research 147: 95–109

Siddiqi, A. (2013) 'Important Determinants of Child Labour: A Case Study for Lahore', American Journal of Economics and Sociology 72.1: 199–221 STCP (2002a) Child Labour in the Cocoa Sector of West Africa: A Synthesis of Findings in Cameroon, Côte d'Ivoire, Ghana, and Nigeria, Ibadan: Sustainable Tree Crops Programme, International Institute of Tropical Agriculture

STCP (2002b) Summary of Findings from the Child Labor Surveys in the Cocoa Sector of West Africa: Cameroon, Côte d'Ivoire, Ghana, and Nigeria, Ibadan: Sustainable Tree Crops Programme, International Institute of Tropical Agriculture

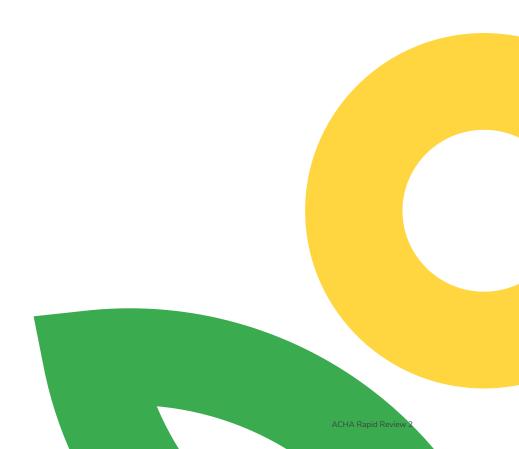
UNDESA (n.d.) **Sustainable Development Goals**, United Nations Department of Economic and Social Affairs (accessed 30 April 2021)

UNESCO Institute for Statistics (2018) One in Five Children, Adolescents and Youth is Out of School, Fact Sheet 48, Paris: United Nations Educational, Scientific and Cultural Organization

Yeboah, T. and Egyir, I. (2020) Forms, Prevalence and Drivers of Children's Work and Children's Harmful Work in Shallot Production on the Keta Peninsula, South-Eastern Ghana, ACHA Working Paper 2, Brighton: Action on Children's Harmful Work in African Agriculture, Institute of Development Studies, DOI: 10.19088/ACHA.2020.002 (accessed 15 April 2021)

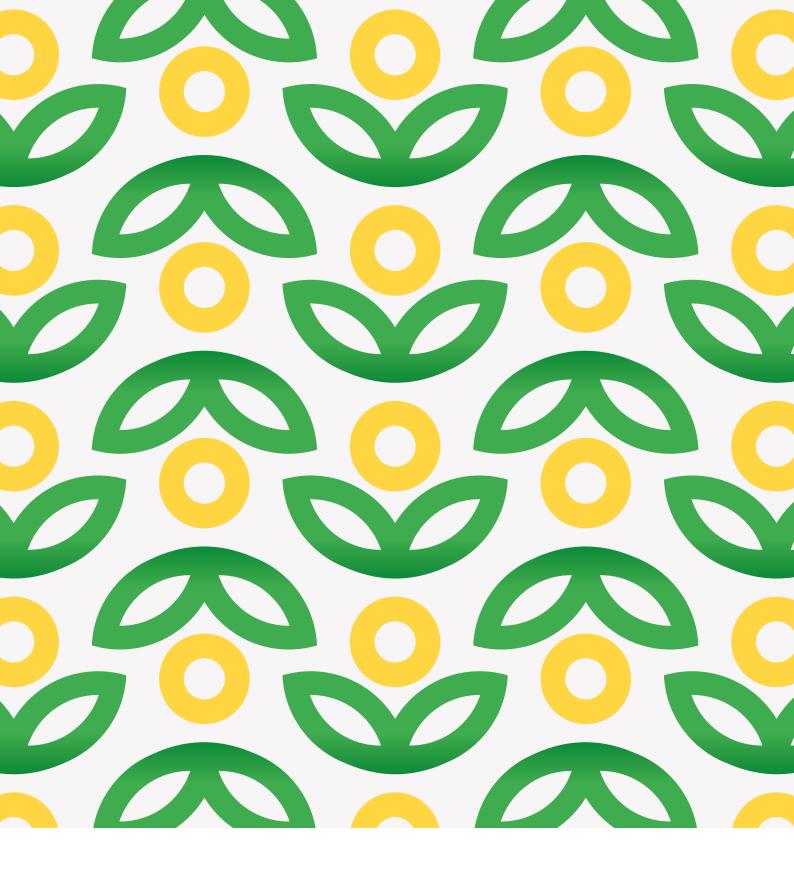
Zdunnek, G.; Dinkelaker, D.; Kalla, B.; Matthias, G.; Szrama, R. and Wenz, K. (2008) Child Labour and Children's Economic Actitivities in Agriculture in Ghana, SLE Working Paper S233, Berlin: Centre for Advanced Training in Rural Development, Humboldt University (accessed 20 April 2021)

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