



# Effectiveness Review of Child Labour Monitoring and Remediation Systems in the West African Cocoa Sector

A review of systems to prevent and address child labour in Côte d'Ivoire and Ghana and their outcomes for children.

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## Protecting children and their families in cocoa growing communities

The International Cocoa Initiative is a non-profit partnership organisation dedicated to improving the lives of children and adults in cocoa growing communities. We are experts on child labour and forced labour in cocoa, undertaking and disseminating research, advising governments and corporations to inform their practices and influence decisions-making, and working with NGOs in the field. We are committed to achieving sustainable cocoa production that protects the rights of children and adults worldwide.

This study was conducted by ICI at the request of its members, as part of a collective learning process. Building on the report from the first phase, published in 2017, this study provides in-depth analysis of data from over 200,000 children covered by Child Labour Monitoring and Remediation Systems (CLMRS) across West Africa.

Drawing on information shared by different stakeholders implementing these systems, including ICI, it aims to answer the following questions:

- How does the design and set-up of these systems affect their ability to identify children in child labour?
- How effective are these systems at protecting children from hazardous work?

We are grateful to all the stakeholders who shared data for this review, as well as to a Technical Working Group, consisting of industry representatives and international non-profit organisations, who guided the development of this study from start to finish.

We would also like to thank our peer reviewer, Andrew Dillon, who provided valuable insights and feedback on the analysis. The study was written by Anna Brüderle, with contributions from Laurent Foubert and Megan Passey.

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# Executive Summary



This study provides an in-depth analysis of data from Child Labour Monitoring and Remediation Systems (CLMRS) from cocoa-growing areas of West Africa. It aims to answer two questions: 1) How does the design and set-up of these systems affect their ability to identify cases of child labour? 2) How effective are these systems at protecting children from hazardous work?

## What is a Child Labour Monitoring and Remediation System?

**Child Labour Monitoring and Remediation Systems (CLMRS) represent a means of targeting prevention, mitigation and remediation assistance to children involved in or at risk of child labour, as well as to their families and communities.**

The concept of Child Labour Monitoring was initially developed in the 1990s by the International Labour Organization (ILO), as part of its International Programme on the Elimination of Child Labour:

*“The immediate goal of child labour monitoring is to identify and remove girls and boys from child labour. It is an active process that involves regular, ongoing direct observations to identify child labourers and determine risks to which they are exposed. It also includes referring children to services, verifying that they have been removed and tracking them afterwards to ensure that they have satisfactory alternatives.”<sup>1</sup>*

Since 2005, the ILO’s *Guidelines for Developing Child Labour Monitoring Processes* have come to serve as the basis for developing and implementing systems to monitor child labour in a wide variety of geographic contexts and across supply chains. In West Africa’s cocoa sector, where child labour is a persistent human rights concern, CLMRS are increasingly being promoted by a range of stakeholders, including governments, certifiers, companies and membership organisations. Moreover, several stakeholders have recently made commitments to scale up these systems significantly across the entire cocoa supply chain.<sup>2</sup>

One factor that may have contributed to the increasing adoption of such monitoring systems is their use as a due diligence tool. The 2011 UN Guiding Principles for Business and Human Rights sets out the responsibility of businesses to put in place “a human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights” and to “enable the remediation of any adverse human rights impacts they cause or to which they contribute”.<sup>3</sup> A raft of legislation that has been adopted or is currently being drafted in various countries is making human rights due diligence mandatory for businesses operating global supply chains. In contexts where the use of child labour in agricultural production is recognised as a salient human rights risk – as is the case in the cocoa sector – increasing numbers of businesses are using CLMRS to conduct due diligence.

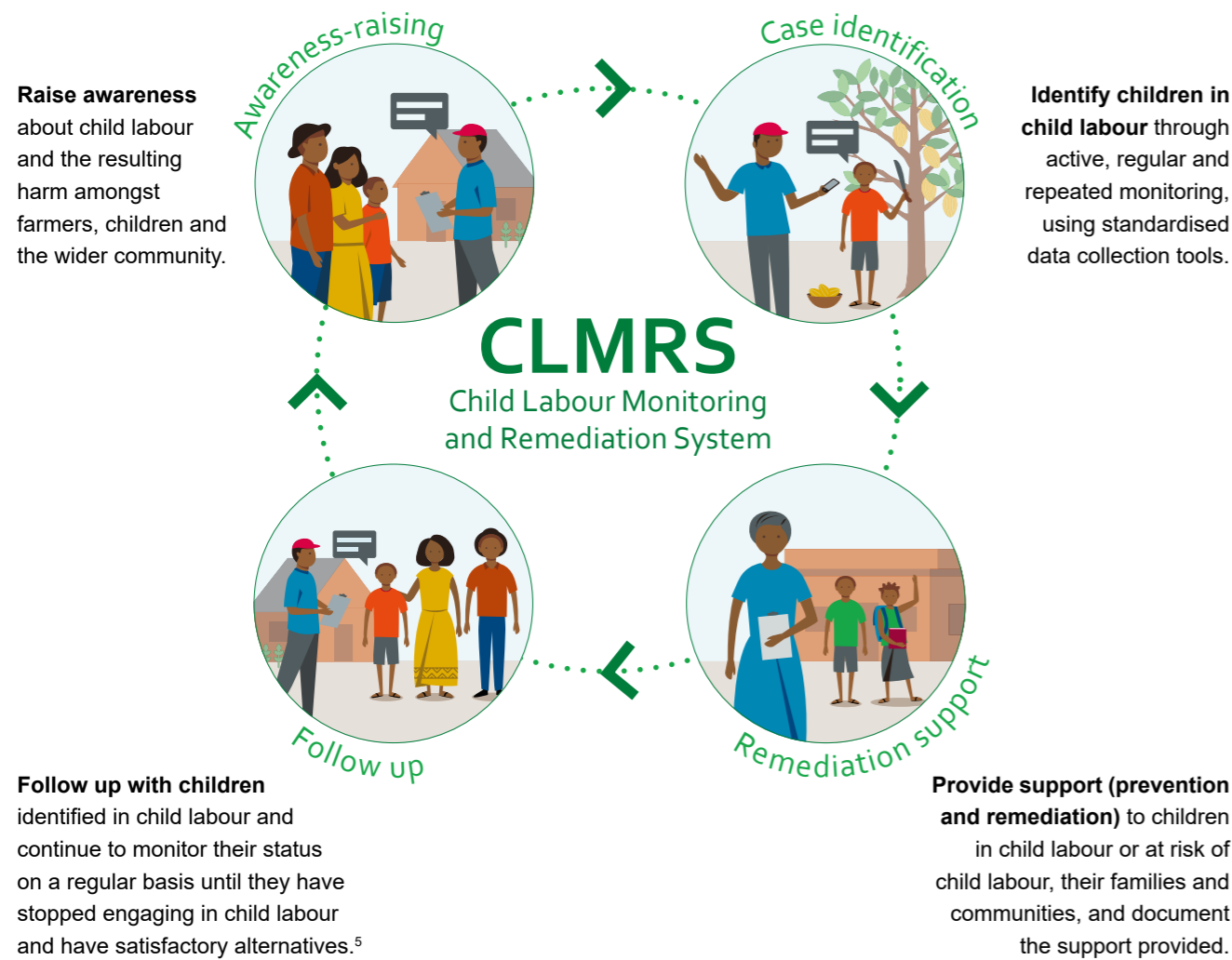
<sup>1</sup> ILO (2005) *Guidelines for Developing Child Labour Monitoring Processes*, 66.

<sup>2</sup> See, for example, *ICI Strategy 2021-26; WCF Strategy: Pathway to Sustainable Cocoa (2020)*. Most recently, in order to mark 2021 as the International Year for the Elimination of Child Labour, ICI and its members have [pledged to scale up system coverage](#).

<sup>3</sup> *UN Guiding Principles on Business and Human Rights*, 2011: 20-21.

The overall aim of the study is to identify ways of improving the efficiency and cost-effectiveness of Child Labour Monitoring and Remediation Systems, as a means of supporting ongoing efforts to scale them up.

In this review, we use an operational definition of Child Labour Monitoring and Remediation Systems (as set out in a benchmarking study previously conducted by ICI), according to which they must include the following core activities:<sup>4</sup>



Wherever possible, all these core activities should be implemented alongside structures already in place to address child labour, especially government systems, and at the same time seek to strengthen them. They should also pursue capacities building of all local stakeholders involved in the system. Outcomes should be independently verified by third parties.

<sup>4</sup> ICI (2021) [Benchmarking Study: Overview and Definition of Child Labour Monitoring and Remediation Systems](#).

<sup>5</sup> ILO (2005) [Guidelines for Developing Child Labour Monitoring Processes](#).



## Objectives, scope and structure of this review

In this study, we examine several child labour monitoring and remediation systems currently in place in the West African cocoa sector. Our aim is to identify ways of improving the efficiency and cost-effectiveness of these systems, as a means of supporting ongoing efforts to scale them up. Building on the 2017 *Effectiveness Review of Child Labour Monitoring Systems in the Smallholder Agricultural Sector of Sub-Saharan Africa*,<sup>6</sup> this second-phase study was able to adopt a more detailed approach that made use of data from systems implemented in a range of different contexts and using different modalities. We analysed data from a total of 12 CLMRS projects, in order to understand how differences in their design, set-up, operation and management affect their functioning. We draw on these insights not in order to recommend a single approach or to propose a 'gold standard' for such monitoring systems, but rather to highlight the variety of approaches that have been adopted, as well as to compare, wherever possible, their effectiveness using a range of different criteria. In this context, the study aims to answer two main questions:

- 1 How does the design of specific components affect a child labour monitoring and remediation system's overall ability to identify cases of child labour?**
- 2 How effective are these systems and the different types of support provided when it comes to protecting children from hazardous work and improving their access to education?**

*Our focus here is primarily on those elements that could be examined on the basis of the quantitative data provided by the participating stakeholders.*

The analysis is divided into two parts: Part A addresses the question of how effective the different systems are at identifying cases of child labour, using data obtained from monitoring visits. Part B addresses the question how effective the different systems are at reducing children's exposure to hazardous work and increasing their participation in school, using data obtained from follow-up visits to children who have received support. [Appendix A](#) provides a detailed overview of the different systems currently in place in the cocoa sector while the [online appendix](#) contains additional details about the data and methods used, along with supplementary analytical results.

<sup>6</sup> ICI (2017) [Effectiveness Review of Child Labour Monitoring Systems in the Smallholder Agricultural Sector of Sub-Saharan Africa](#).

## Data sources and methodology overview

In preparation for this review, ICI requested that participating stakeholders in the sector share two types of data:

- 1 Key information about the system set-up, including the institutional set-up, implementing partners, coverage of farmers, details of data collection and the provision of support to farmers and their children.<sup>7</sup>
- 2 Selected anonymised data from monitoring visits conducted at the child level (including basic demographic information, whether the child was identified as participating in child labour and whether they received any support).

In total, data from six stakeholders has been included in this review, albeit with some variation in the level of detail provided.

**Data from monitoring visits** is available from 12 CLMRS in Côte d'Ivoire and Ghana, including seven implemented directly by ICI, two implemented with ICI support and three implemented independently of ICI. The compilation of this child-level monitoring data has enabled us to address questions related to the identification of child labour cases. More detailed information is available for ICI-implemented CLMRS, allowing us to raise further, more detailed questions concerning where and when visits take place, as well as the characteristics of monitoring agents.

**Data on follow-up visits** to children previously identified as participating in child labour (which were available only from systems at an advanced stage of implementation) is used to evaluate a given monitoring system's success at improving children's situation over time.

Data from monitoring visits is available from 12 CLMRS, including 7 implemented directly by ICI, 2 implemented with ICI support and 3 implemented independently of ICI.

<sup>7</sup> Information concerning the cost of the systems was also provided by some stakeholders. However, this information refers to different elements in different systems, meaning that it could not be used for a comparative analysis. Such an analysis will be the subject of a follow-up study, once more consistent and complete information on system costs has been shared and compiled.

## Key recommendations

The main measures identified in this review that could improve the effectiveness of child labour monitoring systems include:

1. Scheduling and adapting awareness-raising campaigns to match the seasonal patterns of certain hazardous tasks, thus improving their effectiveness by helping to increase perceived relevance and to prevent awareness-raising fatigue.
2. Using a combination of household monitoring visits and farm visits to increase the likelihood that all cases of child labour are identified and can be addressed.
3. When recruiting locally based monitors, making efforts to recruit and retain more female monitors, incentivise experienced monitors to stay in the job and set a minimum level of education for prospective monitors (secondary school, if sufficient candidates are available).
4. Focusing extra attention and remediation efforts on out-of-school children, children not living with a biological parent (e.g., children living with relatives or adopted children), boys, older children and eldest siblings, as data suggests these are the hardest profiles to keep away from hazardous work.
5. Verifying through multiple follow-up visits that a child has stopped hazardous work after having received remediation support. We recommend following up on children's progress until they have no longer reported engaging in hazardous child labour for at least two consecutive follow-up visits, with a minimum three-month interval between the visits.



# Findings and recommendations



**Raising awareness** about child labour and the resulting harm amongst farmers, children and the wider community

## What we learn from the data

We analyse the types of tasks children report engaging in throughout the year. The data shows that different types of hazardous tasks follow different seasonal patterns.

## What we recommend

Awareness-raising campaigns addressing specific hazardous tasks could be scheduled to coincide with their peak seasons, for example:

- application of agro-chemicals (May–June)
- land-clearing tasks (May–July)
- use of sharp tools (July–September).

Adjusting the content of awareness-raising sessions on a seasonal basis could help to increase perceived relevance and prevent awareness-raising fatigue, thus enhancing effectiveness.



### Identifying cases of child labour through active, regular and repeated monitoring

#### What we learn from the data

We compare child labour identification rates under various CLMRS projects with child labour prevalence rates as measured by survey research. While some systems are reasonably effective at identifying a significant proportion of child labourers, there is still room for improvement. **Most monitoring systems are not likely to capture all cases among monitored households.**

We find important discrepancies between CLMRS projects with respect to the number of hours children report working per week. This most likely reflects differences in data collection tools, interview techniques and enumerator training.

#### What we recommend

Continued efforts should be made to revise and improve protocols for monitoring visits, data collection tools, messaging around monitoring objectives and training and support for monitoring agents, to minimise under-identification.

Obtaining adequate estimates from children concerning the number of hours worked on specific tasks is challenging. CLMRS implementers should therefore:

- ensure that data collection tools, interview techniques and enumerator training follow best practice guidance on survey techniques with children (e.g. <https://childethics.com/ethical-guidance>)
- use short recall periods (maximum one week) for questions relating to the time spent on certain activities
- schedule sufficient time in each monitoring interview to go through questions about the tasks the children engage in, recognising how difficult it can be for them to accurately estimate time spans
- use a simplified module to estimate work intensity for children below 10 years of age

#### What we learn from the data

Cases of child labour in the cocoa industry are identified year-round, but the data reveals that **there are periods of the year when child labour identification rates increase**, notably during the peak harvest season (October to January) and during school holidays.

Under most CLMRS, agents visit farmers at home to conduct interviews about the participation of children in farm work. In some systems, these home visits are supplemented by random visits to cocoa farms to check on-site for cases of child labour. We find that **farm visits frequently lead to the identification of children living in the household, who were absent at the time of the home visit** and not mentioned by the parents, as well as of children not living in the farmer's household.

In any monitoring system, the agents in charge of data collection play a crucial role in producing some of the most important outcomes. When monitoring visits are conducted by locally based monitoring agents, we find that **agents with specific profiles have a higher likelihood of identifying cases of child labour**; notably:

- **female agents** identify more cases than male agents per number of visits
- agents with **higher education** levels identify more cases per number of visits than those with primary education only
- with **experience**, agents become better at identifying cases of child labour
- agents identify fewer cases per number of visits, the more farmers they are required to cover
- agents identify slightly more cases of child labour per number of visits outside of their own communities than within them

#### What we recommend

In order for systems to detect a high share of child labour cases, monitoring visits could be intensified during certain periods of the year, notably:

- during peak harvest season
- during or just after school holidays

Monitoring agents and other staff involved in the management of CLMRS should be informed about these typical seasonal patterns in child labour identification. This will allow them to adjust their operational strategies and activity planning.

CLMRS should use a combination of household visits and farm visits to increase the likelihood that all cases of child labour are identified and can be addressed. Farm visits provide an important additional layer of monitoring, particularly when it comes to ensuring that children not living in the farmer's household (e.g. children working on their relatives' or neighbours' farms) do not fall through the cracks.

For systems that hire locally based agents, it is recommended to:

- set secondary school as a minimum level of education (if sufficient candidates are available)
- make efforts to recruit and retain more female monitoring agents
- incentivise agents to stay on the job after they have acquired experience
- adjust the number of farmers covered by each agent to match the time the agent can dedicate to the job, thus ensuring that each household visit can be completed with due care
- help agents to reach farming households outside of their own community (e.g. by ensuring they have bicycles or motorcycles at their disposal, or by paying transport allowances)



**Provision of support (prevention and remediation) to children in child labour and others at risk**

**What we learn from the data**

We look at contextual factors which are correlated with the likelihood of a child stopping hazardous work under a CLMRS. The data shows that **these systems are better at stopping some children from engaging in hazardous work than others**: girls, children who were in school at the time they were identified as participating in child labour, children living with at least one biological parent, children without older siblings and children living in a community with a primary school.

**What we recommend**

Children with specific profiles are particularly difficult to keep away from hazardous work and therefore should be given extra attention and be the subject of extra effort for remediation, notably:

- out-of-school children, especially when there is no primary school present in their community
- children not living with a biological parent (e.g. children living with relatives or adopted children)
- boys, older children, and children with older siblings.

**What we learn from the data**

We look at how different types of remediation given to child labourers are associated with the likelihood of their stopping hazardous work. First of all, since **CLMRS are capable of reducing children’s engagement in hazardous work**, the range of remediation provided to children under these systems proves to be effective on the whole. If we compare the different types of remediation, **interventions to improve access to and quality of education** (e.g. school kits, bridging classes and school renovations) **appear to be a particularly promising remediation strategy** under the systems in place in Côte d’Ivoire.

Other forms of remediation implemented under various systems include birth certificates, vocational training, literacy classes for parents, income generating activity support, setting up savings groups, VSLAs and community service groups. The data also suggests that birth certificates, school improvements, bridging classes, tutoring and awareness-raising might be more effective for girls than for boys (at least in the context of ICI-implemented systems in Côte d’Ivoire), while school improvements might be more effective for younger children.<sup>8</sup>

**What we recommend**

In light of preliminary results concerning the effectiveness of different types of remediation, CLMRS should scale up their interventions to improve access to quality education in order to help children stop hazardous work.

In order to inform cost-benefit analyses of the effectiveness of different remediation types, more solid evidence is needed about the kind and magnitude of the impact of the various types of remediation. Experimental research and the careful analysis of additional data from follow-up visits to remediated children should be conducted, in order to make the evidence base more robust.

We look at how different types of school-related remediation given to out-of-school children in child labour are associated with the likelihood that these children start attending school. Results suggest that the provision of school kits and school uniforms is a promising strategy for increasing school participation amongst child labourers covered by CLMRS in Côte d’Ivoire. Different types of remediation produce different results, depending on which outcome we look at.

**Types of remediation which appear less effective at keeping children away from hazardous work may be effective at increasing school participation and vice versa.**

According to preliminary results, CLMRS should scale up the provision of school kits and school uniforms, which can help to overcome some of the financial barriers to school attendance for poor households and thereby increase school participation amongst child labourers.

Remediation planning should also take into account the effectiveness of different forms of remediation in relation to different objectives. For example, types of remediation that are less effective at stopping children from engaging in hazardous work may facilitate school participation, leading to better learning and development outcomes. However, these broader outcomes lie beyond the scope of the data collected from the monitoring systems.

<sup>8</sup> All the results concerning the effectiveness of different types of remediation are purely descriptive, because remediation is allocated to children based on their specific needs and profiles.





### Following up with children identified as participating in child labour and monitoring their status

#### What we learn from the data

Of the children identified as participating in hazardous child labour, who were interviewed under ICI-implemented CLMRS in Côte d'Ivoire:

- 38% reported no longer performing hazardous tasks during their **first follow-up visit**.
- 54% reported no longer performing hazardous tasks during **one of a series of follow-up visits**.
- 29% reported no longer performing hazardous tasks after **two consecutive follow-up visits**.

#### What we recommend

Standardised, precisely defined indicators should be used to determine the effectiveness of a given CLMRS at reducing children's exposure to hazardous work.

#### What we learn from the data

CLMRS can help not only to identify whether a child is engaged in child labour or not, but also the extent of their exposure to hazards. Under the ICI-implemented systems in Côte d'Ivoire, **children who continue to engage in hazardous work are exposed to fewer different types of hazard when follow-up visits are conducted** (on average, child labourers report exposure to two different hazards; **23%** of follow-up visits recorded a **decrease** in hazards, while **19%** of visits recorded an **increase** in hazards). On average, however, there was no reduction in the length or frequency of work (child labourers aged 10+ monitored by ICI-implemented systems in Côte d'Ivoire work on average 3.2 hours on a working day, 3 days a week).

The sequences of visits to individual children represent a valuable data source for understanding the dynamics of child labour in the context of monitoring systems in the cocoa industry. The data shows that **children who appear to be out of child labour during one visit may be found participating again in child labour when visited a few months later**. Among all child labourers who at one point reported no longer performing hazardous tasks, 24% reported performing hazardous tasks again during a subsequent visit.

In addition to addressing child labour, CLMRS aim to improve children's access to several fundamental rights, including to quality education. Under ICI-implemented systems in Côte d'Ivoire, **around one in four out-of-school child labourers began attending school**. This shows that these systems are effective not only at reducing children's participation in child labour, but also at getting children back into school.

#### What we recommend

CLMRS should track the evolution of the severity of child labour among children who continue working. Severity can be measured in terms of the different types of hazards they are exposed to or in terms of working time. These indicators provide a means of assessing whether the situation is improving or worsening.

Monitoring systems should verify through at least two follow-up visits that a child has stopped hazardous work after having received remediation support.

We recommend continuing to follow up with children until they no longer report having engaged in hazardous child labour for at least two follow-up visits, with a minimum three-month interval between the visits. The data suggests that after this point, the risk of a child falling back into hazardous child labour is reduced to 16%.

Children who both participate in child labour and do not attend school are particularly vulnerable and should be prioritised to receive support.

Monitoring and remediation systems should identify improved access to quality education as a central objective and indicator, as well as developing strategies to further improve the effectiveness of support related to education.

# Introduction



## What is a CLMRS?

**Child Labour Monitoring and Remediation Systems (CLMRS) are a means of targeting prevention, mitigation and remediation assistance to children involved in or at risk of child labour, as well as to their families and communities.**

The development of *systems* to monitor child labour has been underway since the 1990s, largely driven by the ILO's International Programme on the Elimination of Child Labour (IPEC). With the goal of identifying and removing children from child labour, these systems are based around the key elements of "**regularly repeated direct observations** to identify child labourers and to determine risks to which they are exposed, **referral** of these children to services, **verification** that they have been removed and **tracking** them afterwards to ensure that their situation has improved."<sup>9</sup>

Systems to monitor and remediate child labour have been put in place in multiple countries, in partnership with a range of actors at the local and national level, and in many different supply chains, including cocoa.

The 2011 UN Guiding Principles for Business and Human Rights sets out the responsibility of businesses to put in place "a human rights due diligence process to identify, prevent, mitigate and account for how they address their impacts on human rights" and to "enable the remediation of any adverse human rights impacts they cause or to which they contribute".<sup>10</sup> These same messages emerge from the OECD Guidelines for Multinational Enterprises, which emphasise the responsibility of businesses to carry out human rights due diligence, explaining that "addressing actual and potential adverse human rights impacts consists of taking adequate measures for their identification, prevention, where possible, and mitigation of potential human rights impacts, remediation of actual impacts, and accounting for how the adverse human rights impacts are addressed."<sup>11</sup>

In response to this guidance, increasing numbers of businesses have recognised child labour as a salient human rights risk and adopted Child Labour Monitoring and Remediation Systems as a way of conducting their due diligence in response to this risk.

This trend is being accelerated by a raft of legislation that has been adopted or is currently being drafted in various countries which will make human rights due diligence mandatory for businesses operating global supply chains.<sup>12</sup> Such legislation is expected to increasingly oblige businesses to assess human rights risks across their supply chains, to take action to prevent, mitigate and address these risks, to ensure that victims of human rights abuses receive remediation and to report on their efforts and outcomes.

Increasing numbers of businesses in the cocoa sector have recognised child labour as a salient human rights risk, and adopted Child Labour Monitoring and Remediation Systems as a way of conducting their due diligence in response to this risk.

<sup>9</sup> ILO (2005) [Guidelines for Developing Child Labour Monitoring Processes](#).

<sup>10</sup> [UN Guiding Principles on Business and Human Rights](#), 2011: 20–21.

<sup>11</sup> OECD (2011) [OECD Guidelines for Multinational Enterprises](#), OECD Publishing.

<sup>12</sup> For more information, see: ICI (2019) [Human Rights Due Diligence in Supply Chains, a review of legislation and guidelines through the lens of the UN Guiding Principles](#).

All of the core activities under a CLMRS should be implemented wherever possible in partnership with structures already in place to address child labour, notably governmental structures, and should seek to strengthen capacities of local stakeholders, as well as of existing child protection systems. The outcomes of these activities should be verified by independent third parties.

In the smallholder agricultural sector, and in the cocoa sector in particular, Child Labour Monitoring and Remediation Systems (CLMRS) have gained increasing prominence, due in part to their promising results,<sup>15</sup> but also to the fact that their establishment was made mandatory in the 2016 UTZ code of conduct and in the 2015 CocoaAction strategy from the World Cocoa Foundation (WCF). In 2020, the Rainforest Alliance published its *Sustainable Agriculture Standard*, which included the need to “assess and address” child labour, as well as other human rights risks, as a core element.<sup>16</sup> In Ghana and Côte d’Ivoire, Child Labour Monitoring and Remediation Systems are an explicit requirement for certified farmer groups.<sup>17</sup>

By 2020, Child Labour Monitoring and Remediation Systems were estimated to cover around 25% of all cocoa-growing households in Côte d’Ivoire and Ghana.<sup>18</sup> Multiple stakeholders, including governments, certifiers, companies and membership organisations are increasingly implementing, supporting or requiring CLMRS, and several stakeholders have made recent commitments to scale up CLMRS significantly across the cocoa supply chain.<sup>19</sup>

### Objectives and scope of this review

In this study, we examine several Child Labour Monitoring and Remediation Systems being implemented in the cocoa sector in West Africa. Building on the 2017 *Effectiveness Review of Child Labour Monitoring Systems in the Smallholder Agricultural Sector of Sub-Saharan Africa*,<sup>20</sup> also conducted as a collective multi-stakeholder exercise led by ICI, this second phase has been able to go into much greater detail, drawing from data now available from CLMRS that are being implemented by a growing number of stakeholders, including government, private sector and civil society actors. For this review, we have analysed information provided by 9 stakeholders who have implemented CLMRS, and granular data from 12 CLMRS projects, in order to understand how differences in the design, set-up, operation and management of such systems affect the way they function. We use these data insights not to recommend a single approach or to propose a ‘gold standard’ for CLMRS, but rather to highlight various modalities that have been chosen by stakeholders and to compare, where possible, their effectiveness in light of different criteria.

By 2020, Child Labour Monitoring and Remediation Systems were estimated to cover around 25% of all cocoa-growing households in Côte d’Ivoire and Ghana.

For this review, we adopt an **operational definition** of a *Child Labour Monitoring and Remediation System* which, in line with the language of the UN Guiding Principles, includes explicit mention of both monitoring and remedy, and is based on the CLMRS Benchmarking study.<sup>13</sup> This definition requires that a CLMRS be able to implement the following core activities:

- **Raise awareness** about child labour and the resulting harm amongst farmers, children and the wider community.
- **Identify children in child labour** through active, regular and repeated monitoring, using standardised data collection tools.
- **Provide support** (prevention and remediation) to children in child labour or at risk of child labour, their families and communities, as well as document the support provided.
- **Follow-up with children** identified in child labour and continue to monitor their status on a regular basis until they have stopped engaging in child labour and have satisfactory alternatives.<sup>14</sup>

<sup>13</sup> ICI (2021) *Benchmarking Study: Overview and Definition of Child Labour Monitoring and Remediation Systems*.

<sup>14</sup> ILO, *Child Labour Monitoring*.

<sup>15</sup> Nestlé (2019) *Tackling Child Labour*.

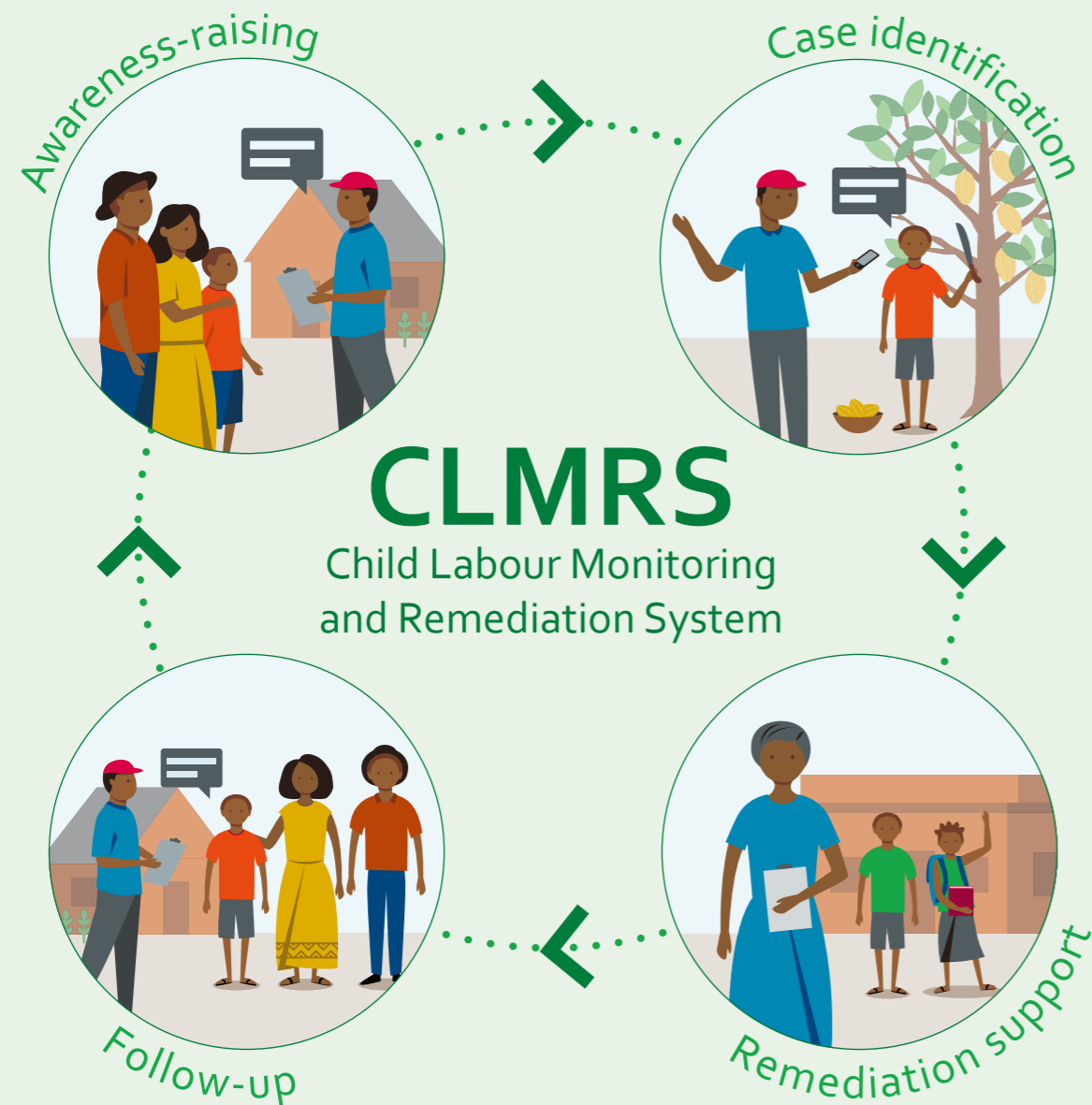
<sup>16</sup> Rainforest Alliance (2020) *Assess and Address*; Rainforest Alliance (2020) *Sustainable Agriculture Standard, Farm Requirements*.

<sup>17</sup> Rainforest Alliance (2021) *Policy for Farm and Chain of Custody Certification in Cocoa*, 11.

<sup>18</sup> Based on reporting from ICI members (see *ICI and its members pledge to scale up child protection systems in 2021*, 30 March 2021).

<sup>19</sup> See for example, *ICI Strategy 2021-26*; *WCF Strategy: Pathway to Sustainable Cocoa (2020)*. Most recently, to mark 2021 as the International Year for the Elimination of Child Labour, ICI and its members have pledged to scale up systems that prevent and address child labour to cover 540,000 cocoa-growing households in Côte d’Ivoire and Ghana by the end of 2021 *ILO (2005) Guidelines for Developing Child Labour Monitoring Processes*.

<sup>20</sup> ICI (2017) *Effectiveness Review of Child Labour Monitoring Systems in the Smallholder Agricultural Sector of Sub-Saharan Africa*.



The overall aim of this study is to **identify ways of improving the efficiency and cost-effectiveness of Child Labour Monitoring and Remediation Systems**, to inform ongoing efforts to scale them up.

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This research was guided by a Technical Working Group, consisting of CLMRS stakeholders from the cocoa and chocolate industry and international non-profit organisations, who worked collectively to determine the research questions, refine effectiveness criteria, contribute data from their systems for the analysis and participate in the review of the findings and recommendations. The catalogue of research questions, the data analysis plan and the analytical results have also been reviewed by an external academic expert.

This study aims to answer two main questions:

- 1 How do the institutional set-up and design of a CLMRS affect its ability to identify children in child labour?
- 2 Which modalities of a CLMRS work best to protect children from hazardous work and promote their education?

*These questions are examined based on the quantitative data provided by CLMRS implementers. The effectiveness of a CLMRS must also be evaluated in terms of how sustainable it is, how successful it is at increasing capacity and ownership among local stakeholders, whether it helps to reinforce existing structures and whether it supports child labour prevention in the longer term. The data available for this report and the experience gathered to date does not allow us to adequately answer these questions. They remain priority topics to be investigated as more data becomes available and qualitative assessments and longer-term observations allow for solid conclusions.*

### Structure of the report

This report is organised as follows: first, we briefly take stock of the progress made since phase 1 of the ICI CLMRS effectiveness review. Second, we present the data and methodology used for analysis. This is followed by the core analysis section, which is divided into two parts: Part A addresses the question of how effective different CLMRS are at *identifying* cases of child labour, drawing on child-level data available from monitoring visits. Part B addresses the question of how effective CLMRS are at improving children's situations, in terms of their exposure to hazardous work and their participation in school, drawing on available data from follow-up visits to children after they received support. [Appendix A](#) provides detailed **overviews of the different systems currently in place in the cocoa sector**, in order to understand differences in their set-up and coverage. An [online appendix](#) provides additional detail on the data and methods used, as well as supplementary analytical results.

## Progress since ICI’s CLMRS Effectiveness Review Phase 1

The report from phase 1 of ICI’s CLMRS Effectiveness Review, *Effectiveness Review of CLMRS in the Smallholder Agricultural Sector of Sub-Saharan Africa, 2017*, features recommendations to implementers of CLMRS, general recommendations for the cocoa sector and a set of questions to be answered during the second phase of the effectiveness review. Table 1 recalls each of these recommendations, takes stock of what has been partly or fully accomplished and notes where further progress is needed.

**Table 1: Summary of progress since the 2017 Effectiveness Review of CLMRS in the Smallholder Agricultural Sector of Sub-Saharan Africa.**

Project-specific recommendations to implementers	
Recommendation in phase 1 report	Accomplished / progress made?
When implementing a CLMS, define an indicative list of key inputs (participation in a training and a field exercise, etc.) and outcomes (key competences, skills and information acquired) as minimum training requirements for monitors and ensure that these are assessed before monitors begin their tasks.	<p>✓ Recommendation followed by most CLMRS implementers.</p>
Define unified terms of reference with control points for third-party verifications of CLMS.	<p>✓ Recommendation followed by some CLMRS implementers.</p> <p>▶ More transparency needed on third-party verification by several CLMRS implementers.</p>
Simplify existing CLMS procedures / data collection processes and integrate them into existing governance/management structures to increase cost-efficiency.	<p>? Data sharing from several systems for this review has shown that there is a partial overlap in data structures, but major transformations are still needed before the data can be consolidated.</p> <p>▶ Efforts are ongoing to define common monitoring frameworks including reporting on output and outcomes of CLMRS (see ICI CLMRS benchmarking study).<sup>21</sup></p>

**Key**  
 ✓ Accomplished    ✓ Some progress made    ? Gaps remain

<sup>21</sup> ICI (2021) *Benchmarking Study: Overview and Definition of Child Labour Monitoring and Remediation Systems*.

## Recommendations for Effectiveness Review Phase 2

Recommendation in phase 1 report	Accomplished / progress made?
Using targeted Knowledge, Attitudes and Practices surveys (ex-post assessments), assess the respective impact of each type of awareness-raising intervention, for each target group and, where possible, establish the cost of each intervention to be able to determine their cost-effectiveness.	<p>? Data available for the second phase of the CLMRS ER does not allow us to assess the impact of specific awareness-raising interventions or to determine cost-effectiveness.</p> <p>▶ Dedicated separate study planned for a comparative assessment of different awareness-raising approaches.</p>
Pool information from all CocoaAction companies and other actors operating CLMSs on the beneficiaries-per-monitor ratio, their level of compensation, their means of transport (bike, motorbike, etc.) and the average distance to the farmers.	<p>✓ Partly accomplished.</p> <p>Several companies have shared data on various elements of their systems, including granular data from monitoring visits.</p> <p>▶ Elements recommended for comparative analysis in phase 1 were deprioritised, in favour of other more relevant aspects, such as payment of monitoring agents, context of monitoring visits and system sustainability.</p>
Compare identification/remediation rates.	<p>✓ Accomplished, see Analysis Part A, p. 20 / Analysis Part B, p. 38.</p>
Compare existing data collection tools and define a list of common questions and indicators used across different systems.	<p>✓ Accomplished, see Appendix A.</p>
Disaggregate results (e.g. the number of children once identified in child labour, but that no longer are) according to the type of remediation support received and, wherever possible, match it with information on the household and community environment, in order to identify the strategies that are most efficient in reducing child labour.	<p>✓ Accomplished, see Analysis Part B, p. 47 onwards.</p>
Encourage companies to isolate the unit cost of different key components of their CLMS (at least of each remediation intervention – especially those at household and individual level) to be able to determine and compare their cost-effectiveness.	<p>? Data available for the second phase of the effectiveness review do not allow us to assess and compare the cost-effectiveness of different components.</p> <p>▶ If CLMRS implementers are ready to share selected elements of system cost in a coherent format, this would enable insights into cost-effectiveness.</p>

General recommendations for the cocoa sector	
Recommendation in phase 1 report	Accomplished / progress made?
Agree on a unified procedure to identify cases of child labour based on existing national legislations and international conventions.	<ul style="list-style-type: none"> <li>✓ All CLMRS reviewed for this report apply national legislation and international conventions to identify cases of child labour. However different data collection tools and procedures are applied under different systems.</li> <li>▶ More progress needed towards aligned procedures and methods for child labour identification and measurement.</li> </ul>
Develop/adapt existing interview guides for monitors that encompass good practices in child labour identification (age verification techniques, etc.) and include a strong child-safeguarding component as part of the mandatory training of all monitors.	<ul style="list-style-type: none"> <li>✓ Partly accomplished. Exchange of good practice within the sector on interview techniques, child-safeguarding, etc, is occurring.</li> <li>▶ ICI is currently developing a CLMRS manual, which will cover training guidelines for monitoring agents, protocols for monitoring and remediation, child safeguarding guidelines, etc.</li> </ul>
Gather legal requirements for the operation of a CLMS in Ghana and Côte d'Ivoire in a short guide to be shared with the whole cocoa sector.	<ul style="list-style-type: none"> <li>✓ No legal requirements relating to CLMS per se in place; legislative frameworks related to child labour for Côte d'Ivoire and Ghana are summarised in documents available from ICI.</li> <li>▶ Progress to be monitored.</li> </ul>
Define a unified procedure for declaring that a previously identified/assisted child is no longer in child labour.	<ul style="list-style-type: none"> <li>✓ This report suggests a possible benchmark; no general alignment within the sector achieved yet.</li> </ul>
Agree on a definition of what "covered" or "monitored by the system" means practically, to allow for better comparison between systems.	<ul style="list-style-type: none"> <li>✓ Common definitions of "covered" and "monitored" have been agreed in the context of the <a href="#">CLMRS Benchmarking Study</a>.</li> </ul>
Review and refine the existing set of effectiveness criteria that is adapted to different CLMS and/or encourage companies in the sector to put in place data collection systems capable of tracking them so that comparison between the effectiveness of different systems becomes possible.	<ul style="list-style-type: none"> <li>✓ Progress made during discussions among the Technical Working Group overseeing the ER phase 2.</li> </ul>
Define roles and the division of labour between national and private CLMS.	<ul style="list-style-type: none"> <li>✓ Some implementers have discussed and agreed upon roles and responsibilities with producing country governments. Governments are increasingly playing their coordination role, gathering data from all systems.</li> </ul>



# Data sources and methodology overview



In preparation for this review, ICI requested CLMRS implementers in the sector to share two types of data:

- 1 Key information about system set-up**, including institutional set-up, implementing partners, coverage of farmers, modalities of data collection and provision of support to farmers and their children.<sup>22</sup>
- 2 Selected anonymised data from monitoring visits**<sup>23</sup> conducted under the CLMRS, including:
  - Basic demographic information on households and children (e.g. age, gender and schooling status).
  - Whether a child was identified in child labour, in hazardous child labour or at risk of child labour during a given visit, the type of hazardous tasks done and the number of hours worked.
  - Whether the household or the child has received any support and the circumstances of the visit (e.g. at the farmer's home or on the farm, role of the data collection agent).

By January 2020, six stakeholders had shared data collected up to the end of 2019. All were companies implementing CLMRS in agricultural commodity sectors: five of them in the cocoa sector and one in the tobacco sector (see box 1). All shared key information about their systems, while four shared more detailed information from monitoring visits, with some variation in the details provided. The data shared by different companies was combined with data from CLMRS implemented by ICI on behalf of different companies. In addition, ICI drew upon available information about the Child Labour Monitoring Systems put in place by the governments of Côte d'Ivoire (Système d'Observation et de Suivi du Travail des Enfants en Côte d'Ivoire, SOSTECI) and Ghana (Ghana Child Labour Monitoring System, GCLMS) to add to the overview of different types of system.

In terms of different CLMRS projects reflected in this review, the **key information about system set-up** covers 15 different CLMRS projects in the cocoa sector, of which 10 are in Côte d'Ivoire and 5 in Ghana. This data feeds into the assessment of the different approaches to CLMRS that exist in the cocoa sector presented in [Appendix A](#).

**Selected anonymised data from monitoring visits** is available from 12 CLMRS projects, including 7 projects for which ICI manages the data. In total, this data covers more than 70,000 cocoa farmers, and include almost 190,000 child interviews, with approximately 150,000 held in Côte d'Ivoire and 40,000 in Ghana.

This data was compiled into a single data base, which has been used to examine questions related to *identification of child labour cases*, such as: how do rates of child labour identification differ across projects? Under what circumstances is it most likely that cases of child labour are identified? How can system modalities be adjusted so that the share of undetected cases of child labour is as low as possible?

For ICI-implemented CLMRS projects, more detailed information is available, which allows us to examine specific additional questions, such as: how do the circumstances of the visit and characteristics of the monitoring agent relate to the likelihood of identifying cases of child labour?

Finally, we use data on follow-up visits to children previously identified in child labour (which were available only from CLMRS projects at an advanced stage of implementation) to examine questions around the system's success at improving children's situation over time.

<sup>22</sup> Information on cost of the system was also provided by some implementers. However, the cost information referred to different elements in different systems, so that it could not be included in any comparative analysis. Once more consistent and complete information on system costs is shared and compiled, this will be the subject of a follow-up study.

<sup>23</sup> The data was anonymised by replacing any personal information by identification codes and any geo-codes were removed.

## BOX 1

## CLMRS and its key elements beyond the cocoa sector

Similar to CLMRS in the cocoa sector, there are also some examples of companies in other agricultural sectors which are building systems to monitor and address child labour and other labour rights abuses in their supply chains.

One example is the Agricultural Labour Practices (ALP) programme being implemented since 2011 by Philip Morris International (PMI), which aims at eliminating child labour and other labour abuses and ensuring safe and fair working conditions on its tobacco supply chain. The key elements of the ALP programme reflect to a large degree those established for CLMRS in the cocoa sector. PMI describes the six parts of their ALP programme as follows:

- 1. The ALP Code**, comprising seven principles and 33 measurable standards, applies to 285,900 farmers from whom tobacco is sourced directly or indirectly. The principles are as follows: no child labour, no forced labour or human trafficking, fair treatment, a safe work environment, income and work hours, freedom of association and terms of employment. This code is based on the labour standards of the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work and other relevant ILO conventions.
- 2. Awareness-raising and training for suppliers, farmers, workers and PMI's Sustainable Agriculture teams** about applying the code and addressing any shortcomings in the process.
- 3. Internal farm-by-farm monitoring** by 2,675 field technicians employed by PMI and their tobacco leaf suppliers across 23 countries. Field technicians visit the farms regularly to ensure the implementation of the ALP Code and identify and address issues requiring immediate remediation.
- 4. External assessments and verifications** – by Control Union (a specialist supply chain auditor) and local partners – to independently evaluate the implementation of the ALP programme and the data reported by the farm-by-farm monitoring.
- 5. Collaboration with civil society organisations, governments and the private sector** on initiatives to address systemic issues and to empower communities through participatory processes and grievance mechanisms.
- 6. Transparency by sharing progress and challenges annually in the integrated report**, quarterly progress updates on specific topics or countries and publishing all Control Union assessments (available at [pmi.com](http://pmi.com)).

Importantly, the ALP programme considers child labour as one amongst several labour rights concerns which are interrelated, including forced labour, workers' safety and health, discrimination and income. While child labour is identified as the most salient labour and human rights violation in some of the ALP programme countries, the ALP programme by design acknowledges the fact that child labour is part of a bigger picture. By monitoring a range of labour and human rights practices on more than 90% of farms, the programme captures the farmers' social and economic situation and behavioural patterns in a comprehensive manner.

Over the period 2013–2018, PMI engaged in an in-depth analysis of the data emerging from their monitoring system to better understand the risk factors and root causes of child labour in the various sourcing contexts. Overall, the data underlined the key role of poverty as a root cause. In response, PMI integrated a living income target to their strategy (a commitment to ensuring that 100% of contracted farmers supplying tobacco to PMI make a living income by 2025).

For more information about PMI's ALP programme and strategy for addressing child labour, see [What Does Our Sustainable Future Look Like \(PMI – Philip Morris International\)](#).





# Analysis Part A:

## Identifying cases of child labour



How do child labour identification rates vary across projects?	33
What levels of child labour intensity do different CLMRS projects measure?	38
How does child labour identification vary at different times of the year?	41
How effective are different types of monitoring visits at identifying child labour?	46
Which monitoring agents are more effective at identifying cases of child labour?	50

**This section examines the likelihood of identifying children in child labour through monitoring visits. It looks at how different elements of system design and implementation – including who conducts monitoring visits, when, where and how – relate to the likelihood that a system can identify cases of child labour, so that later these children can receive support.**

### How do child labour identification rates vary across projects?

#### SUMMARY

##### Data source

- Compiled data from monitoring visits under 12 CLMRS projects in Côte d'Ivoire and Ghana.

##### Methods

- Descriptive comparison of child labour identification rates.

##### Indicators / key concepts / definitions

- Child labour identification rate: number of children identified in child labour, divided by the number of children interviewed during monitoring visits under a given CLMRS project.

##### Caveats

- Comparability of results across CLMRS projects is compromised as monitoring visits take place under different circumstances.



### The method we use

We compare the rates of hazardous child labour cases identified across various CLMRS projects in Ghana and Côte d'Ivoire. The rate of hazardous child labour identification is defined here as the number of children identified in hazardous child labour divided by the number of children interviewed during monitoring visits under a given CLMRS project. The data used is predominantly from first-time monitoring visits, which took place before the farmers and children interviewed received any support. We also compare the rates of hazardous child labour cases identified under CLMRS with the rates of hazardous child labour amongst cocoa farming households, as assessed through nationally representative surveys.

#### Definitions:



**Child labour** is work that “deprives children of their childhood, their potential and their dignity, and that is harmful to physical and mental development.”<sup>25</sup>



**Hazardous Child Labour** is work that is “likely to harm the health, safety or morals of children” due to its nature or the circumstances in which it is carried out.<sup>26</sup> Hazardous Activity Frameworks, developed by national governments, list specific tasks that are considered as hazardous.

### What we find

We find **huge differences between CLMRS projects in how likely it is that a monitoring visit results in identification of a child labour case (see figure 1).** The rates of hazardous child labour identification in projects in Côte d'Ivoire range between 0.5% and 26.7%, while in projects in Ghana they range between 2.5% and 60.4%. According to the CLMRS data we have available, monitoring visits in Ghana are more likely to identify cases of child labour than in Côte d'Ivoire.<sup>24</sup> While this trend is consistent with findings from the Tulane and NORC surveys, in the context of CLMRS, it is partly explained by other factors not related to the country context, such as the modalities of data collection, as analysed in the following sections. There are however some common patterns, which are consistent with findings from survey research on child labour prevalence in cocoa production (e.g. NORC 2020): in almost all projects, boys are more likely to be identified in hazardous child labour than girls, and children above the age of 12 years are more likely to be identified in hazardous child labour than younger children.

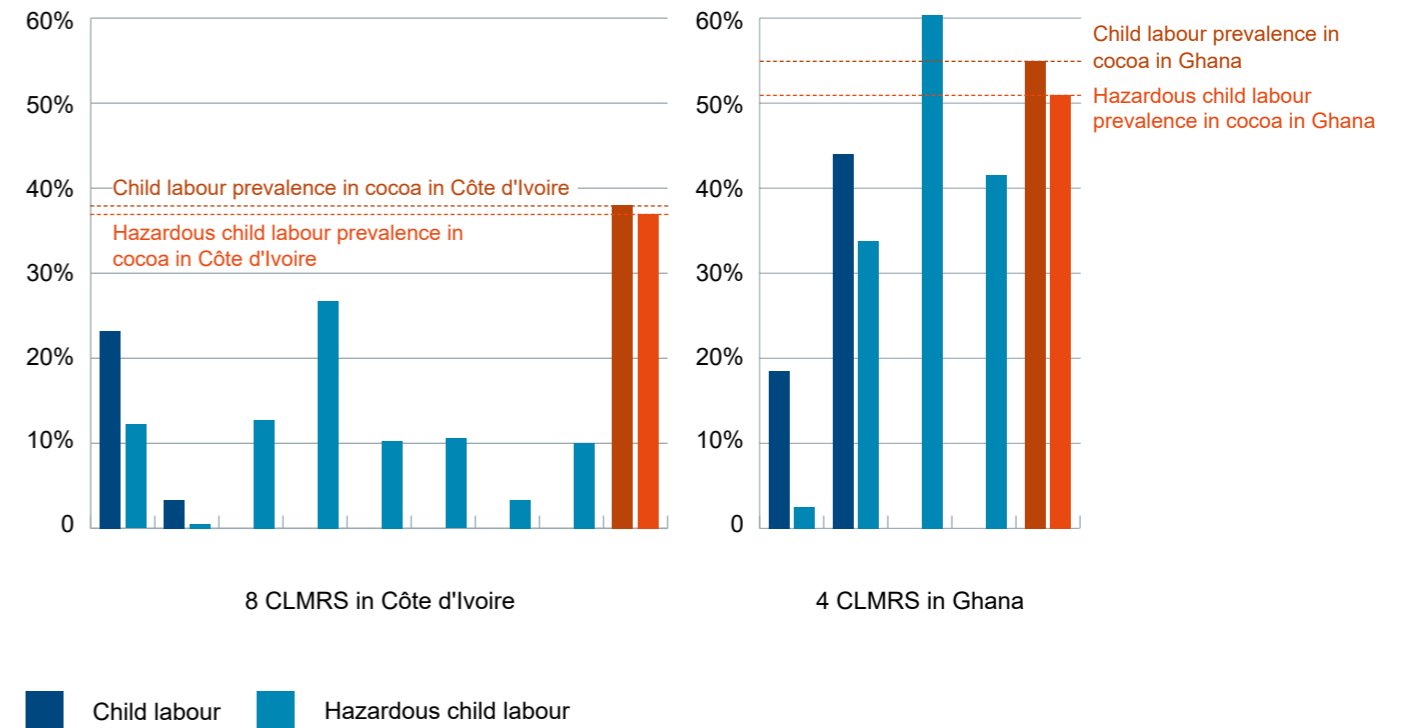
On average, the rates of hazardous child labour cases identified under CLMRS are substantially lower than the rates of child labour prevalence in cocoa production in Côte d'Ivoire and Ghana, according to the 2020 NORC Survey Report, which provides the best available estimates for the sector at the national level. It is of course possible that the true prevalence of child labour amongst households covered by CLMRS projects is indeed lower than the respective national average (e.g. due to differences in socio-economic profiles of farmers who are members of certified cooperatives or to differences across cocoa-growing areas). However, judging from the variation in child labour prevalence *between* socio-economic strata and *between* regions as measured by the 2018/19 NORC survey research (see figure 2 and table 2, which show differences between NORC sub-samples by father's education, and by region), we would not expect the true child labour prevalence for CLMRS-covered farmers to deviate from the national average by as much as what we observe; and we would also not expect the differences between groups of farmers covered by different systems to be as marked as the observed differences in identification rates.

24 Tulane University (2015) [Survey Research on Child Labor in West African Cocoa Growing Areas. Final Report. Assessing Progress in Reducing Child Labor in Cocoa Production in Cocoa Growing Areas of Côte d'Ivoire and Ghana.](#)

25 ILO [What is Child Labour?](#)

26 ILO [Hazardous Child Labour.](#)

**Figure 1: Identification rates of child labour and hazardous child labour in 8 different projects in Côte d'Ivoire and 4 different projects in Ghana.**



Notes: Child labour identification rates are defined as numbers of children identified in (hazardous) child labour, divided by numbers of children interviewed during monitoring visits. Data source: Compiled data from monitoring visits under 12 CLMRS projects in Côte d'Ivoire and Ghana. [\(Hazardous\) child labour prevalence rates in agricultural households in cocoa growing areas of Côte d'Ivoire and Ghana according to NORC \(2020\).](#)

**Table 2: Child labour prevalence rates within sub-samples of the 2018/19 NORC survey research data set, by father's education (calculations by ICI).**

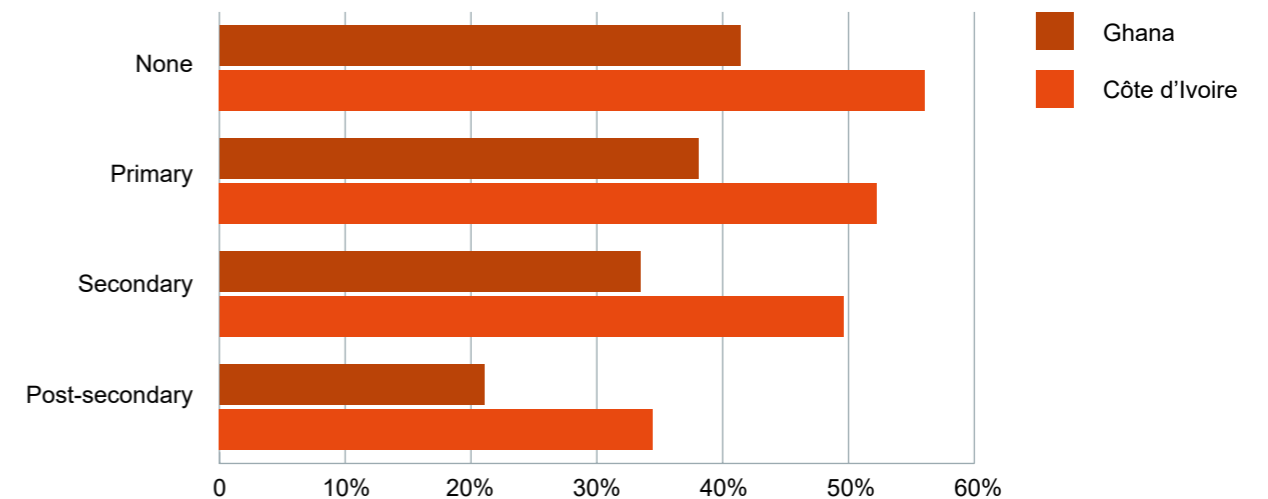
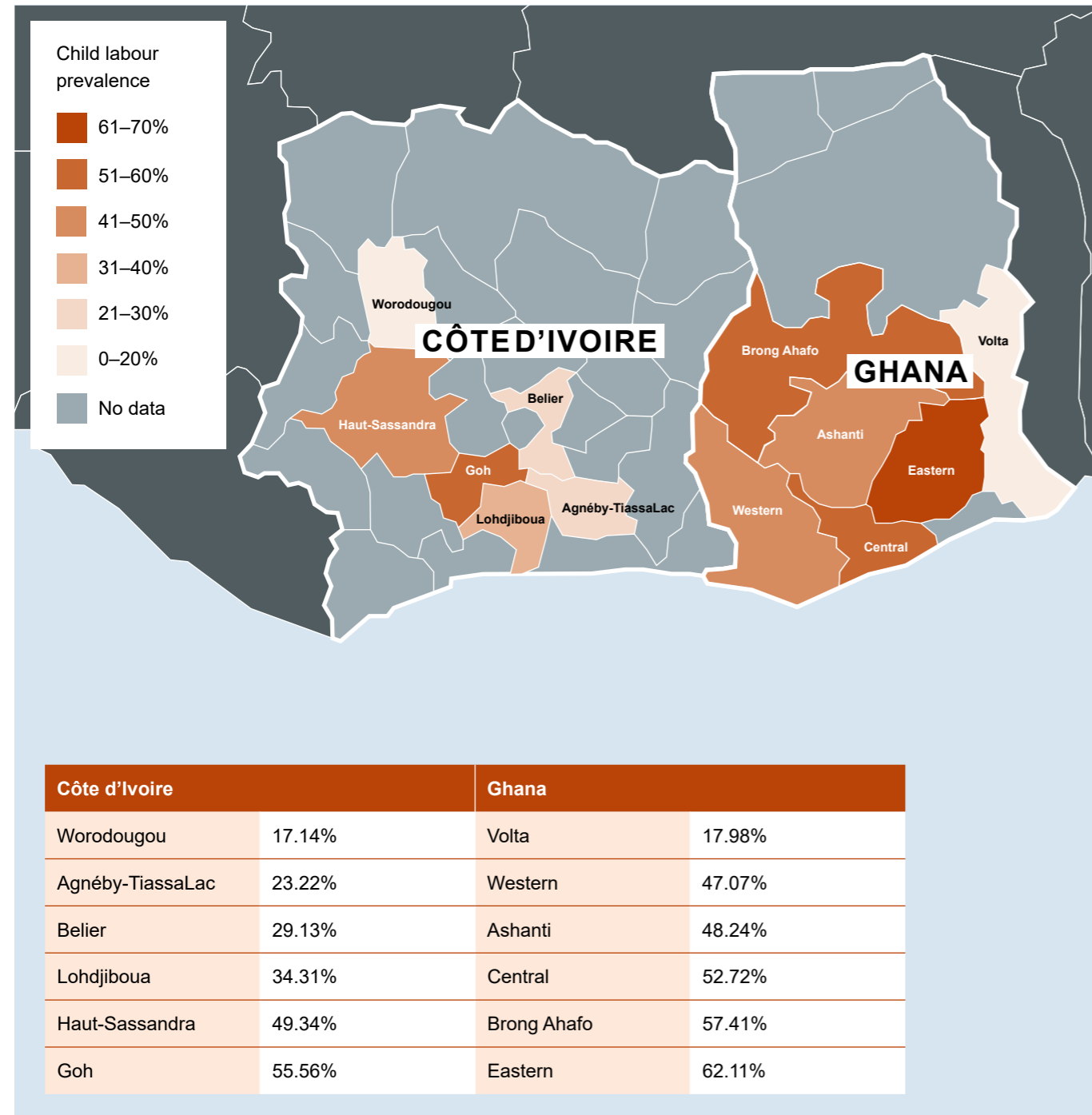


Figure 2: Child labour prevalence rates within sub-samples of the 2018/19 NORC survey research data set, by region (calculations by ICI).



Data source: [NORC cocoa report data sets](#).

## What we conclude and recommend

CLMRS data collection is guided by different objectives and different circumstances than sample-based survey research, which is designed to generate robust estimates of child labour prevalence. Under CLMRS, less time-consuming interviews with less elaborate questionnaires may be preferred because this allows more children to be monitored with a given budget.

While some systems are reasonably effective at identifying a significant proportion of child labourers, there is still room for improvement, with most CLMRS failing to capture all cases within the monitored farming households.

While each CLMRS has to find the right balance between how many children can be covered and how thorough each monitoring interview can be, CLMRS implementers should explore how to limit under-reporting of child labour. Options may include:

- Making sure monitoring agents have an in-depth understanding of definitions and concepts of child labour.
- Training monitoring agents more carefully in interview techniques with children.
- Providing more intensive supervision, guidance and quality control in relation to the work of monitoring agents.
- Improved data collection tools, including translation into local languages.
- If under-reporting of child labour is due to a fear that households will lose certification or other benefits, awareness-raising might be adjusted to explain that monitoring is intended as a supportive rather than a punitive action.

Another option to improve the efficiency of child labour monitoring is to prioritise high-risk farmers for visits, based on a previous assessment of the household's risk using readily available data. For a comprehensive overview of available methods for risk modelling and experience to date with risk-based child labour monitoring, see ICI's recent overview paper.<sup>27</sup>

### IN A NUTSHELL

- CLMRS in the cocoa sector in Côte d'Ivoire and Ghana perform very differently in terms of identifying cases of child labour.
- While some systems are reasonably effective at identifying a significant proportion of child labourers, there is still room for improvement, with most CLMRS failing to capture all cases within the monitored farming households.
- CLMRS implementers should make continued efforts to revise and improve protocols for monitoring visits, data collection tools, messaging around CLMRS objectives and training and support for monitoring agents, to keep under-identification at a minimum level.

<sup>27</sup> ICI (2021), Risk Models to Predict (Hazardous) Child Labour.

## What levels of child labour intensity do different CLMRS projects measure?

### SUMMARY

#### Data source

- Compiled data from monitoring visits under 12 CLMRS projects in Côte d'Ivoire and Ghana.
- Of the 12 CLMRS projects, 10 collect data on the number of hours children work in cocoa per day or per week.

#### Methods

- A descriptive comparison of outcomes measured across CLMRS projects.

#### Indicators / key concepts / definitions

- Number of hours a child has worked in cocoa over the course of one week: for children aged 10 years or older only (younger children are not able to provide sufficiently reliable estimates of time spent doing a certain activity).

#### Caveats

- The comparability of results across CLMRS projects is compromised as monitoring visits take place under different circumstances across CLMRS projects, while different projects work with different data collection tools.

## The method we use

For those children who are identified in child labour under the different CLMRS, we compare the median number of hours they have worked over the course of one week, as reported by the children themselves. This information is available for 10 out of the 12 CLMRS projects in our compiled data set. Even though this information is generally collected from all children between age 5 and 17, we include here only records from children aged 10 years or older. This is because it is generally difficult for children to provide reliable estimates of the time they have spent doing a certain activity during a given reference period, and even more so for younger children. Previous analyses of child labour data from other contexts done by ICI have shown that estimates of hours worked are much more plausible if reported by older children.<sup>28</sup>

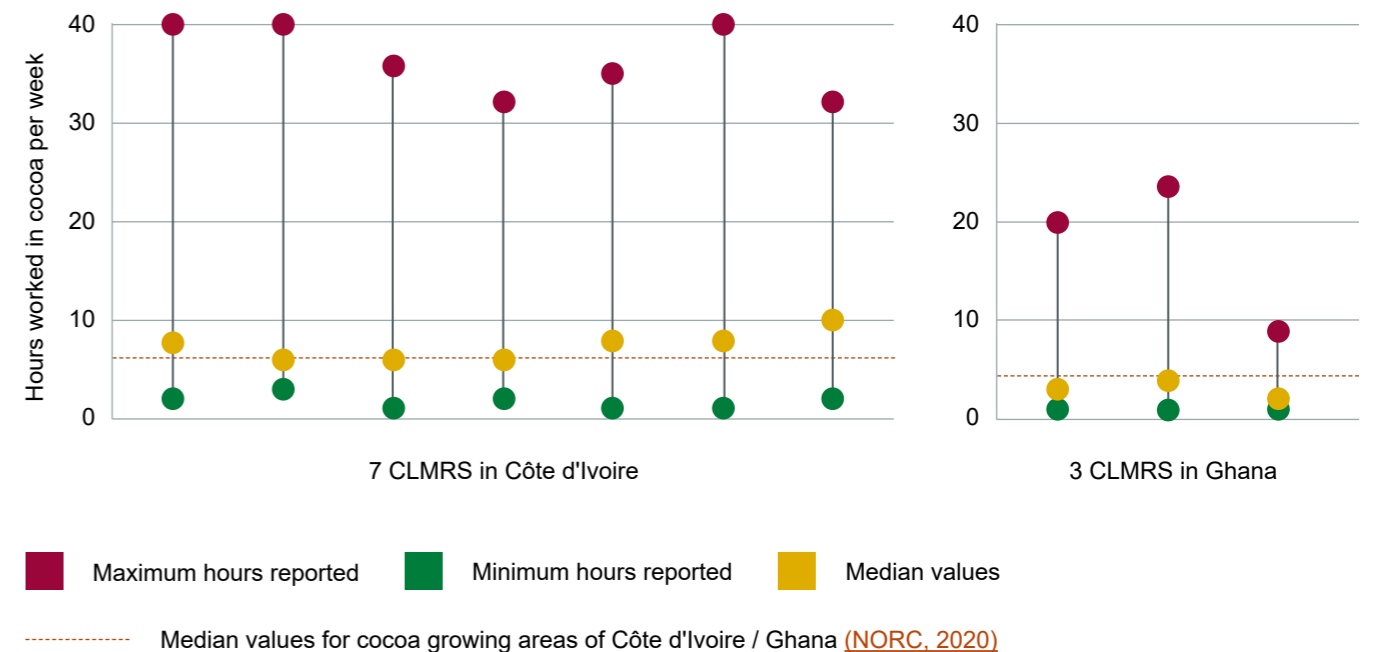
<sup>28</sup> See for example, the ICI report [The Impact of ICI's Community Development Programme in Ghana and Côte d'Ivoire on Child Labour \(2020\)](#).

## What we find

The median number of hours worked per week, as reported by working children, varies significantly between CLMRS projects, from 6 to 10 hours per week for projects in Côte d'Ivoire and from 2 to 4 hours for projects in Ghana. Similarly, the range between minimum and maximum reported number of hours worked is very different from one CLMRS project to another (figure 3).<sup>29</sup>

The number of hours worked per week, as reported by working children, varies significantly from 6 to 10 hours for projects in Côte d'Ivoire and from 2 to 4 hours for projects in Ghana.

**Figure 3: Median and ranges of reported hours worked in cocoa per week for children in child labour, aged 10–17 years, by CLMRS project.**



Note: Hours worked in cocoa per week as reported by children identified in child labour or in hazardous child labour. Each vertical line represents one CLMRS project. Outliers have been removed. Data source: Compiled data from monitoring visits under 7 CLMRS projects in Côte d'Ivoire and 3 CLMRS projects in Ghana which collect information on hours worked by working children.

<sup>29</sup> Note that the median and ranges are independent of child labour identification rates, given that they are based on children identified in child labour only.

## What we conclude and recommend

Previous ICI analyses of child labour data from various sources suggest that children's reported estimates of hours worked vary widely depending on how questions are structured (e.g. whether children are asked how many hours they work on a working day and how many days they have worked during the past week or whether they are asked how many hours they have worked on each individual day over the past week).<sup>30</sup> Also, ICI's experience with data collection has shown that outcomes depend largely on how much time and effort the data collection agent devotes to helping the child provide an estimate. **Therefore, we suggest that the differences in child labour intensity measured under the different CLMRS projects are likely due to differences in data collection methods**, rather than actual variation in hours worked.

CLMRS implementers should be aware of the methodological challenges involved in collecting this type of information. They should:

- ensure that data collection tools, interview techniques and enumerator training follow best practice guidance on survey techniques with children (such as in <https://childethics.com/ethical-guidance>)
- use short recall periods (maximum one week) for questions related to time spent on certain activities
- plan in sufficient time in each monitoring interview to go through this module, recognising how difficult it can be for children to give accurate estimates of time
- use a simplified module to estimate work intensity for children below 10 years of age

### IN A NUTSHELL

- Different CLMRS projects measure very different numbers of hours worked per week by working children.
- These differences are likely due to differences in data collection tools, interview techniques and enumerator training.
- If information on hours worked by children is collected, appropriate data collection techniques must be applied to ensure that the data is of sufficient quality.



## How does child labour identification vary at different times of the year ?

### SUMMARY

#### Data source

- Compiled data from monitoring visits under 12 CLMRS projects in Côte d'Ivoire and Ghana.

#### Methods

- Child labour identification rates for each month of the year, averaged over all CLMRS projects in the compiled data base.

#### Indicators / key concepts / definitions

- Child labour identification rate: number of children identified in hazardous child labour divided by the number of children interviewed during monitoring visits in a given month.

#### Caveats

- Comparability of results across CLMRS projects is compromised by variation in recall periods in the data collection tools used by the different CLMRS projects.

<sup>30</sup> Results available upon request from ICI.

## The method we use

We calculate **for each month of the year** the rate of hazardous child labour cases identified, using the compiled data set of monitoring interviews from CLMRS projects in Ghana and Côte d'Ivoire, from all years for which data is available.

We then specifically examine two potential drivers of seasonal fluctuations in children's engagement in farm work. These are fluctuations in labour demand in cocoa cultivation according to **the agronomic calendar** and in the availability of children enrolled in school according to the **academic calendar**. First, we compare child labour identification rates within and outside of the peak cocoa harvest season, which falls in the months between October and January in both Côte d'Ivoire and Ghana. During this period, additional hands are needed on the farm for harvesting. Second, we examine how child labour identification differs depending on whether an interview is held during or outside of school holidays. First, we compare interviews held during the Christmas break, usually between 22 December and the first week of January (with slight variations from one year to the other and between the two countries<sup>31</sup>), and those held during the harvest season while school is still on. Second, for the period February to September (i.e. after the end of the main harvest season), we compare interviews held during and outside of the summer holidays, which roughly coincide with the month of August and the first half of September (again with slight variations from year to year and between the two countries<sup>32</sup>).

Our data reveals a pattern of **seasonality for child labour identification**, i.e. the likelihood that an interview will detect a case of child labour varies systematically over the course of the year. The seasonal pattern of child labour *identification* probably follows roughly the seasonal pattern of child labour *incidence*, but reporting may lag behind the actual incidence. In fact, some of the questionnaires used for child labour identification under different CLMRS specify reference periods for a child's engagement in hazardous work of up to 12 months, which should in theory smooth out child labour identification rates over the course of the year. However, we see a strong seasonal fluctuation in child labour identification even if data collection tools use reference periods of 12 months, which suggests a **reporting bias towards a short recall period**. In other words, children are more likely to report on work they have done in the immediate past, rather than providing an accurate review of their engagement in work over a specified period of several months to a year.

We also look separately at the seasonal fluctuation in reporting of specific types of hazardous tasks. Because the data collection tools applied under the different CLMRS use slightly different lists of tasks, all based on the national legislative frameworks but aggregated differently, we classify the hazardous tasks reported into four broad categories: **carrying of heavy loads, land clearing, exposure to agro-chemicals and use of sharp tools** (e.g. for the opening of cocoa pods or for the maintenance of plantations).

## What we find

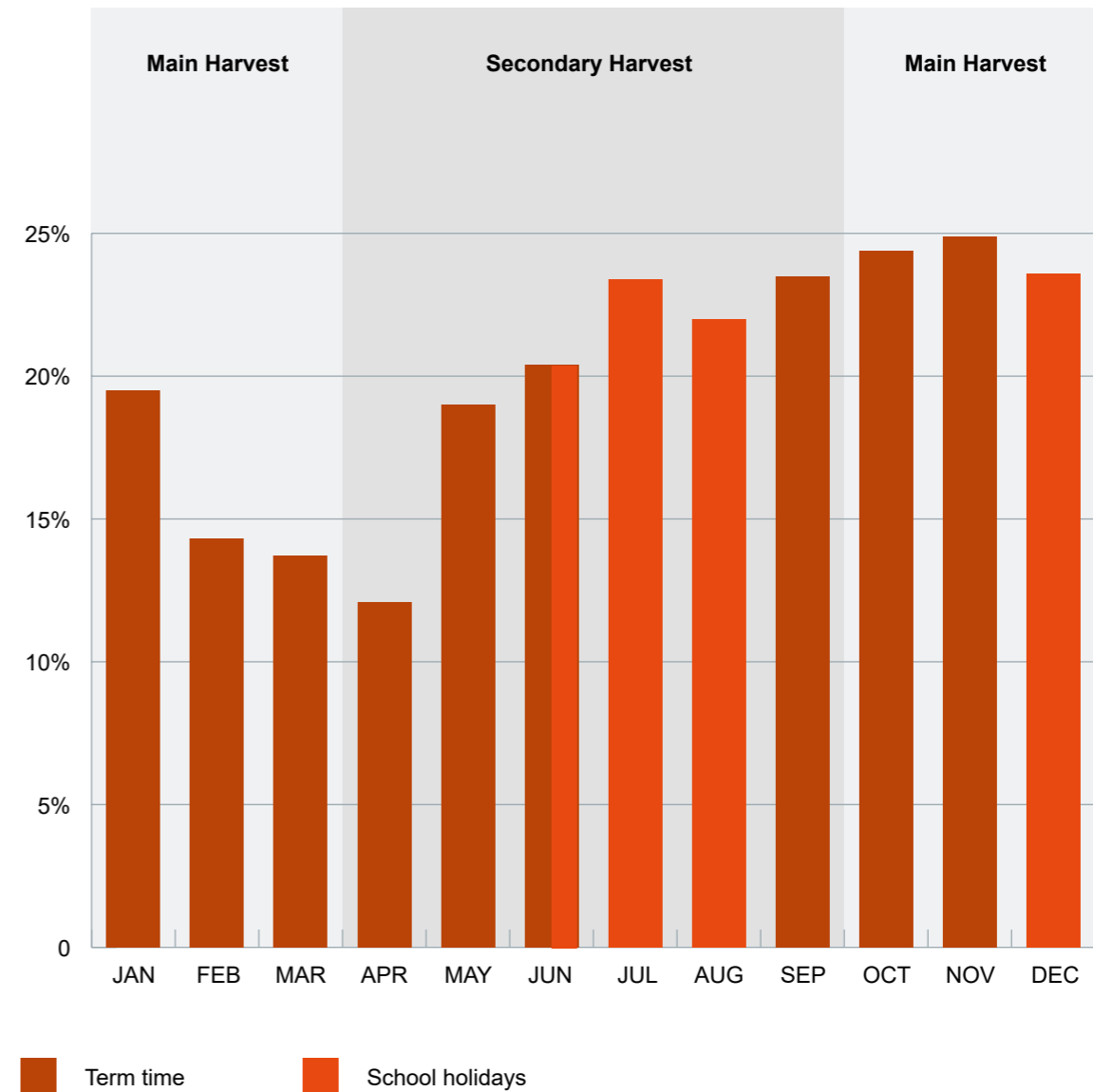
### How does child labour identification, and reporting on specific hazardous tasks, fluctuate over the course of the year?

Within the compiled data set of child interviews, we find that child labour identification rates fluctuate strongly over the course of the year (figure 4). **We can see that, on average, children are more likely to be identified in hazardous child labour when the interview takes place in the months between July and December.** The likelihood of identifying a case of child labour is lowest if the interview takes place in February, March or April. Note that the rate is defined as the number of cases identified per number of children interviewed, and hence is independent of fluctuations in the numbers of interviews held per month.

<sup>31</sup> We consider the exact official start and end dates of the holidays for each year according to the ministries of education.

<sup>32</sup> We consider the exact official start and end dates of the holidays for each year according to the ministries of education.

Figure 4: Child labour identification rates, by month in which the interview was held.



Note: Child labour identification rates are defined as the number of children identified in child labour, in a given month of the year, divided by the number of children interviewed during monitoring visits in that month of the year. Data source: [Compiled data from monitoring visits under 12 CLMRS projects in Côte d'Ivoire and Ghana.](#)

When monitoring visits take place during the peak harvest season (October to January) or during school holidays, the likelihood of identifying cases of child labour is higher.

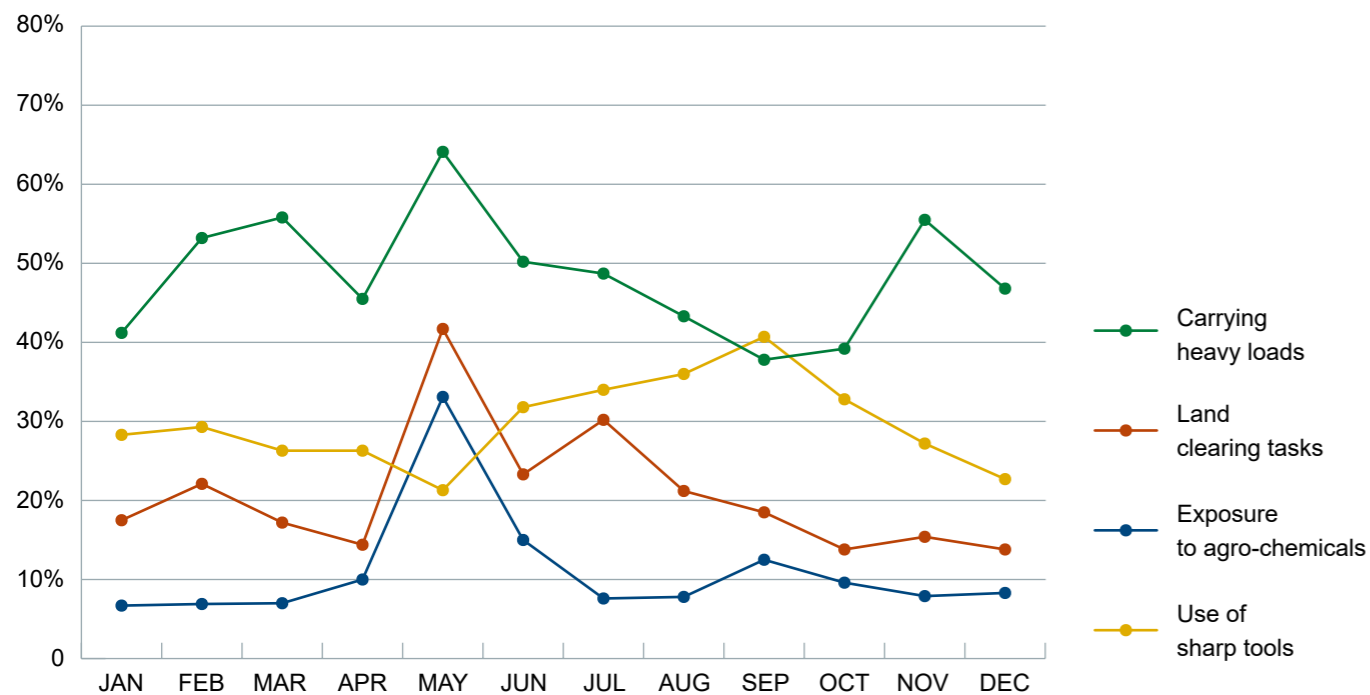
When we divide up the year according to the cocoa harvest cycle, we find that hazardous child labour identification rates are on average higher by 5.4 percentage points when the interviews are held during the peak harvest season (October to January) than when they are held outside the peak harvest season (18.4% outside the main harvest period as against 23.9% within the main harvest period; the difference is statistically significant at the 1% level).

When we divide up the year according to the academic calendar, we find that within the harvest period, the likelihood that a child is identified in hazardous child labour is 8 percentage points higher when interviewed during the Christmas school holidays than during term time (31% for an interview held in the Christmas break as against 23% for an interview held between October and January but outside the Christmas break; the difference is statistically significant at the 1% level). We also find that the likelihood that a child is identified in hazardous child labour is 3.6 percentage points higher when interviewed during the summer holidays than when interviewed during term time outside the peak harvest period (21.3% for an interview held during summer holidays as against 17.7% for an interview held between February and September but outside the summer holidays; the difference is statistically significant at the 1% level).

**How does children’s engagement in different types of hazardous tasks fluctuate over the course of the year?**

The data also shows different seasonal patterns in the reporting of different types of hazardous tasks (figure 5): carrying heavy loads is recorded most frequently in February, March and May, and again in November and December; the use of sharp tools is recorded most frequently between June and October; exposure to agrochemicals is reported with a marked spike in May and June; and land clearing is reported most frequently between May and July. When we compare these patterns with the agronomic calendar for cocoa cultivation, we conclude that the reporting of specific hazardous activities follows the incidence, with a few weeks of time lag. For example, the peak season for application of agro-chemicals according to the agronomic calendar is March to April, but the reporting peak is in May.

**Figure 5: Seasonality patterns for different hazardous tasks: carrying heavy loads, use of sharp tools, exposure to agro-chemicals, and land clearing.**



Notes: Shares of children reporting that they have carried heavy loads, engaged in land clearing, been exposed to agro-chemicals or used sharp tools, among all children identified in hazardous child labour. Data source: Compiled data from monitoring visits under 12 CLMRS projects in Côte d'Ivoire and Ghana.

**What we conclude and recommend**

As a general insight concerning the value of CLMRS data, CLMRS which collect data continuously over the course of the year can provide unique insights into seasonal patterns of child labour in cocoa production in West Africa. In that sense, they are highly complementary to child labour prevalence survey data, which is usually based on a one-off data collection exercise over a short time period.

The compiled CLMRS data shows that children are identified in child labour throughout the year. However, the likelihood that a monitoring visit identifies a case of child labour is higher during certain periods of the year, most notably:

- during the peak harvest season
- during school holidays

Hence, for a CLMRS to capture a high share of child labour cases, monitoring visits could be intensified during certain periods of the year: months in which labour-intensive farm work is conducted should be prioritised, as well as school holidays. Whether this is feasible depends of course on the CLMRS arrangements, notably the agents' working arrangement: part-time agents who are themselves farmers may find it difficult to hold more interviews during the labour-intensive season, but if external agents are hired for data collection once per year, then it is likely that more cases of child labour will be identified if this data collection is scheduled during, or directly after, harvest and school holiday periods. In any case, these results point to the importance of informing monitoring agents and other staff involved in CLMRS management of typical seasonal patterns in child labour identification and of putting in place operational strategies to minimise the risk of overlooking cases of child labour in this period.

Different types of hazardous tasks done by children have different peak seasons over the course of the year. While carrying heavy loads and the use of sharp tools are tasks which are engaged in throughout the year, exposure to agro-chemicals and land clearing are more concentrated at specific times of the year. CLMRS implementers should use this information to tailor awareness-raising efforts, for example by scheduling focused awareness campaigns on specific hazards just before or during the peak periods for specific risks. This could help to ensure that participants perceive the awareness-raising sessions as directly relevant for their everyday work realities, and also to prevent awareness-raising fatigue, by altering topics over the course of the year.

**IN A NUTSHELL**

- Children are identified in child labour in cocoa throughout the year, but there are periods of the year when child labour identification rates are higher.
- If monitoring visits take place during the peak harvest season (October to January), or during school holidays, the likelihood of identifying cases of child labour is higher.
- Different types of hazardous tasks follow different patterns of seasonality. The contents of awareness-raising sessions could be altered over the course of the year according to the peak seasons for specific hazards, in order to increase their relevance and prevent awareness-raising fatigue, and thereby make them more effective.

## How effective are different types of monitoring visits for identifying child labour?

### SUMMARY

#### Data source

- Data from monitoring visits under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

- Child labour identification during home visits as compared to farm visits.

#### Indicators / key concepts / definitions

- Home visit / farm visit: Under most CLMRS, monitoring agents visit farmers in their homes to conduct interviews about children's engagement in farm work. Under some CLMRS, these home visits are then complemented by random visits to cocoa farms to check on-site whether any children are working on the farm and what types of tasks they are doing.

#### Caveats

- Under ICI-implemented CLMRS, a farm visit is recorded only when a child is seen working. Therefore, it is not possible to calculate a "child labour identification rate" for farm visits which could be compared to that from home visits.
- Child information collected at farm visits focuses on tasks done and does not allow an assessment of the child's situation more broadly.
- Farm visits data are available only from ICI-implemented CLMRS in Côte d'Ivoire, hence the validity of results for other contexts is unclear.

## The method we use

We compare the outcomes of monitoring visits to farmers' homes with those of monitoring visits to the farmers' cocoa farm. We use data from ICI-implemented CLMRS in Côte d'Ivoire from which we have records of home and farm visits to substantial numbers of farmers. This data allows us to directly compare outcomes of interviews with the same child depending on where the interview took place.<sup>33</sup>

According to the standard ICI CLMRS protocol, after monitoring agents have visited a cocoa producer at home to register all basic household information and talk to all children aged 5–17 years about their engagement in hazardous child labour, they also visit producers' farms. If monitors see children working on the farm, they survey them on the types of tasks they are doing. However, an entry into the data base for a farm visit is made only if a child is found working.<sup>34</sup> It is therefore not possible to directly compare *child labour identification rates* from farm visits to those calculated for home visits. To draw conclusions on how effective these two types of monitoring visits are in comparison, we examine the counts of child labour cases identified and compare the profiles of children identified in child labour through home as against farm visits.

## What we find

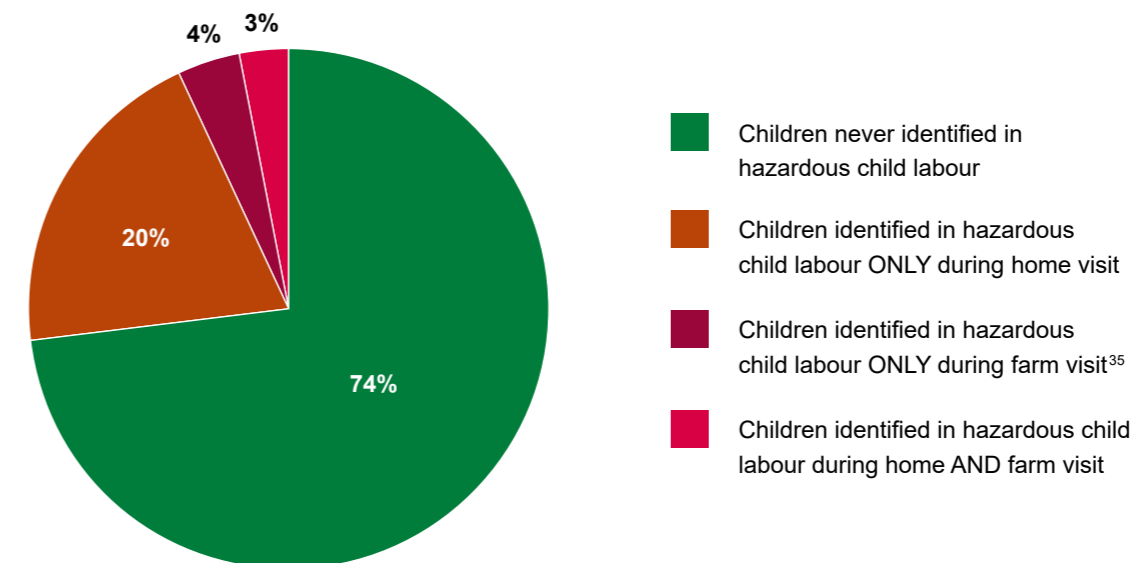
**Many more children are identified in child labour during home visits than during farm visits.** In the first place, this reflects the fact that for home visits monitoring agents have the explicit objective of meeting and talking to all family members, whereas the farm visit is a complementary random check.

Of the children who **reported not doing hazardous child labour when visited at home, only 2% were subsequently found to be doing hazardous work on a farm visit** (but given that not all children are covered with farm visits, as they are intended as spot checks, and that not all farm visits are recorded, it is difficult to draw clear conclusions from this).

Figure 6 breaks down the sample of all children covered by the ICI-implemented CLMRS in Côte d'Ivoire (i.e. all children ever recorded at any monitoring visit) according to whether and on what occasion they were identified in hazardous child labour.

Among children who were seen working when the agent visited the farm, approximately 36% of these engaged in *hazardous* work. The remaining 64% of these children were doing light work only.

**Figure 6: Child labour identification at home and farm visits amongst all children covered by ICI-implemented CLMRS in Côte d'Ivoire.**



<sup>33</sup> Monitoring visits can of course also take place in other settings, such as in schools, at community meetings, at the margins of training and awareness-raising sessions, etc. We compare here home against farm visits, because for these interview types we have sufficient data available.

<sup>34</sup> ICI has recently revised its data collection forms so that in the future, records will also be available for farm visits where no children were found working.

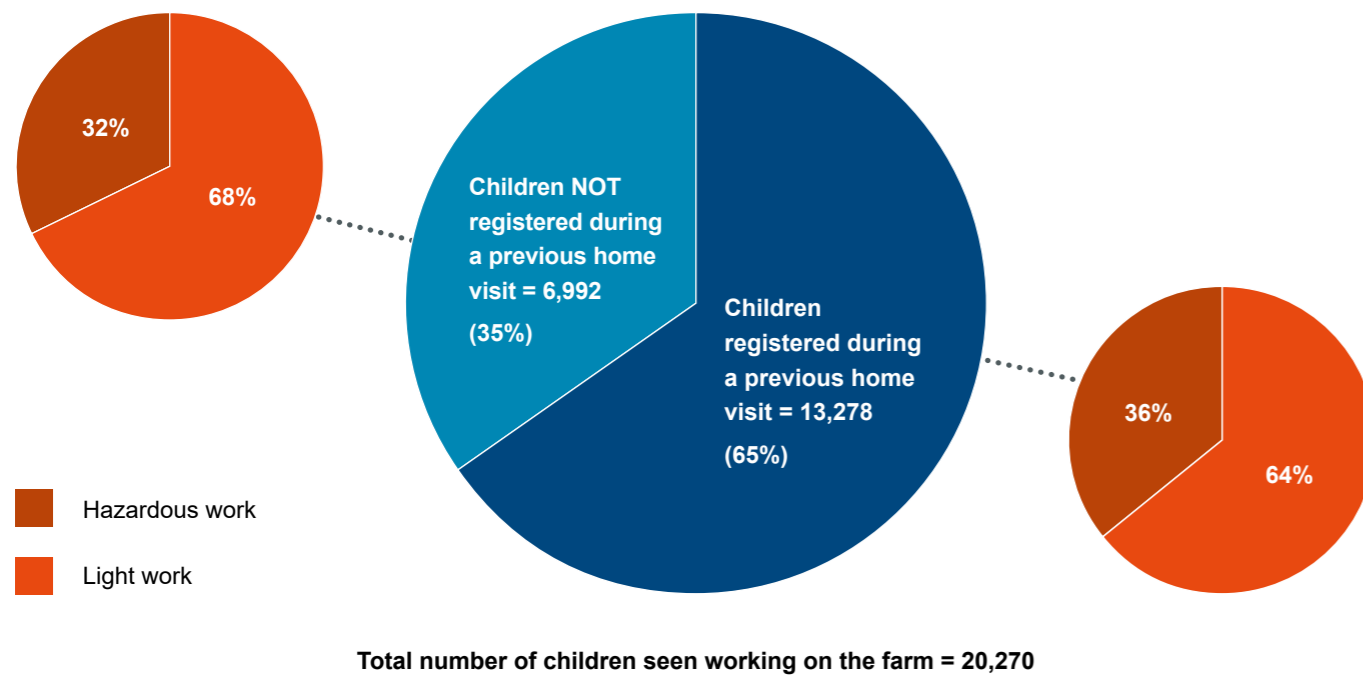
<sup>35</sup> Including both children who have been registered during a previous home visit and children not registered before, even if the farmer's home has been visited.



However, next to verifying the information collected during home visits, farm visits serve another important purpose: the data shows that, in fact, farm visits help to **identify working children not captured at all during home visits**. Considerable numbers of children seen by agents helping on the farm had not been registered at all during a previous home visits (see figure 7). **The total number of children identified for a first time at a farm visit is 6,992, which is approximately 1 in 3 children seen working on a farm.** Amongst these, the share doing hazardous tasks is 32%, which is a very similar rate as in the case of those children who were recorded during a previous home visit.

The total number of children identified for a first time at a farm visit is 6,992, which is approximately 1 in 3 children seen working on a farm.

Figure 7: Children seen working on the farm under ICI-implemented CLMRS in Côte d'Ivoire.



### What we conclude and recommend

The data shows that home and farm visits are highly complementary means of monitoring child labour use by cocoa farmers and that neither type of visit could replace the other.

Importantly, farm visits can provide an **additional monitoring layer to ensure that any child labour use by cocoa producers covered by the CLMRS is identified and can be addressed. They allow us to capture children living in the household who are absent at the time of the home visit and not mentioned by parents, as well as children not living in the farmer's household** (for instance, children working on their relatives' or neighbours' farm). Unfortunately, the data collection tools applied during farm visits under ICI CLMRS are limited to information about work done by children and do not include any additional information about these children, except their names and identifier codes (the data collection tools are designed on the presumption that any demographic characteristics, schooling, vulnerability indicators, etc, of the child are collected at home visits). Hence, the available data does not allow us to better understand the circumstances and profiles of these cases of working children.

Two important recommendations emerge from these findings:

- 1 First, CLMRS should include mechanisms to **capture working children who remain invisible on farming household rosters recorded by the monitoring agents**. One option is for agents to visit cocoa farms on a spot check basis. Another option may be to include in the farmer interview more detailed questions on extended family members or non-family farm workers, and then follow up on any information provided, for example, by visiting workers mentioned by the farmer and surveying them about involvement of children in the paid farm work or by requesting to speak directly to children in the extended family who come to help out.
- 2 Second, when farm visits take place, **data collection tools should be aligned with those used during household visits and collect information on demographic characteristics and situation of any children seen working**. This data should then be used to understand the profiles of child labourers not registered during home visits and to develop strategies to capture these cases more systematically and address them adequately.

#### IN A NUTSHELL

- Visits to homes and on farms are highly complementary tools to monitor child labour use by cocoa farmers.
- Farm visits are one option for capturing child labour cases which remain invisible when screening only direct members of the farming household (e.g. children working on their relatives' or neighbours' farm), but other less costly options could be tested.
- Currently available data provides insufficient understanding of the profiles of children not registered during home visits but seen working on the farm. CLMRS should collect more detailed information on these children to allow their situation to be adequately addressed.



## Which monitoring agents are more effective at identifying cases of child labour?

### SUMMARY

#### Data source

- Data from monitoring visits under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

- [Logit regression](#).

#### Indicators / key concepts / definitions

- Locally based monitoring agents: under ICI-implemented CLMRS, child labour monitoring visits are conducted by locally based agents, often themselves cocoa farmers trained by ICI on child labour, survey techniques and child safeguarding, who are usually hired on a part-time basis and remunerated through a lump-sum payment if they complete a minimum number of monitoring visits per month.

#### Caveats

- Detailed agent characteristics are currently available only for a subset of child interviews held under ICI-implemented CLMRS in Côte d'Ivoire, which works through locally based monitoring agents. The validity of results for other contexts unclear.

## The method we use

We examine how the likelihood of identifying cases of child labour through monitoring visits changes with the profile of the agent conducting the visits. We use data from the ICI-implemented CLMRS in Côte d'Ivoire, where all agents are members of local cocoa producing communities who have received special training in child labour, survey techniques and child safeguarding, and who collect data from all members of farming households using mobile data collection applications. These agents are hired on a part-time basis and receive a lump-sum payment if they complete a minimum number of monitoring visits per month. All of the results reported below therefore apply to the specific context of locally based agents who conduct child labour monitoring visits under CLMRS, similar to the ICI model.

We have the following information about monitoring agents available for analysis: **gender, level of education, place of residence, the number of months the agent has been in service within the CLMRS and the number of farming households covered by the agent.** The place of residence allows us to differentiate monitoring visits by whether the monitoring agent who holds an interview is living in the *same* community as the cocoa farmer interviewed or in a *different* community.

Descriptive statistics for these agent characteristics and how they are correlated with each other in our data set are presented and discussed in an [online appendix](#).

To understand how agent characteristics potentially affect the outcomes of the interviews, we use **multivariate analysis which allows us to separate the effects of agent characteristics from the effects of the profile of communities, households and children covered by each agent.** We use a sample of approximately 7,250 child interviews for which we have information on all the agent characteristics mentioned above,<sup>36</sup> to run a series of logit [regression models](#) specified as follows:

- the dependent variable is whether a child has been identified in hazardous child labour<sup>37</sup>
- as explanatory variables we sequentially add the different agent characteristics
- as control variables, we include a set of child, household and community variables which we know to be correlated with child labour – specifically, we control for the child's age and sex, the number of household members, whether the household head and spouse can read and write, whether the household is headed by a woman, whether the community has a primary school and electricity grid access, and whether it is accessible by road all year round

We sequentially add the agent characteristics to the regressions in order to spot potential instances of multicollinearity

Agents are members of local cocoa producing communities who have received special training. They are hired on a part-time basis and receive a lump-sum payment if they complete a minimum number of monitoring visits per month.

<sup>36</sup> The 7,250 interviews included in this analysis constitute approximately 7% of the available child interviews held under ICI-implemented CLMRS in Côte d'Ivoire.

<sup>37</sup> We use a binary indicator of whether an interview with a child resulted in the identification of a case of hazardous child labour.

## What we find

The results from the regressions (table 3) suggest that, after separating out other factors:

- **Monitoring agents with at least secondary education are more likely to identify child labour cases:** on average their child labour identification rates are 13 percentage points higher than those of agents with lower levels of education.
- **Female agents are more likely to identify child labour cases:** on average their child labour identification rates are 19 percentage points higher than those of their male colleagues.
- Agents living within the same community are less likely to identify cases of child labour, by around 4 percentage points.
- Monitoring agents with more experience are more likely to identify child labour cases: with an additional 10 months of experience an agent has, the likelihood that their interview identifies a case of child labour increases by 2 percentage points on average.<sup>38</sup>
- Agents covering smaller numbers of farmers are more likely to identify child labour cases: when the number of farmers covered by an agent increases by 10, the likelihood that an interview identifies a case of child labour decreases by 2.5 percentage points.

**Table 3: Relationship between monitoring agent characteristics and child labour identification.**

Marginal effects from logit regression, where the dependent variable is: whether interview resulted in identification of a case of child labour.

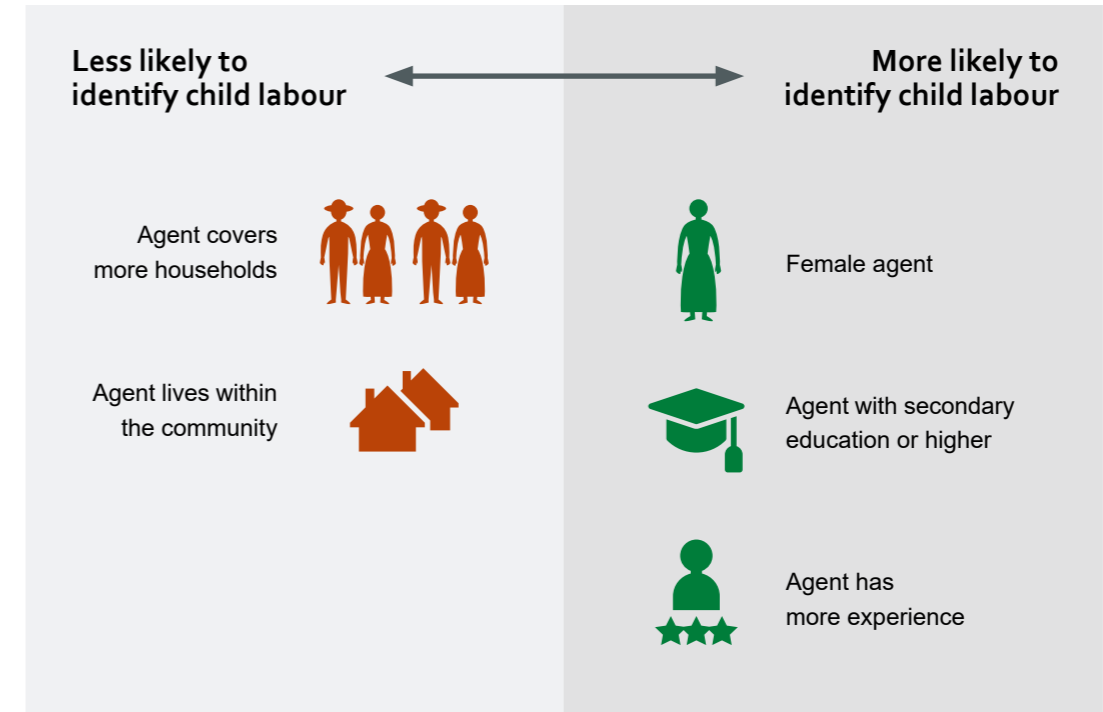
	1	2	3	4	5
<b>Agent has secondary education or higher</b>	0.1304*** (0.0156)	0.1240*** (0.0155)	0.1093*** (0.0157)	0.1109*** (0.0158)	0.1272*** (0.0156)
<b>Agent is female</b>		0.2418*** (0.0301)	0.2169*** (0.0302)	0.2304*** (0.0302)	0.1861*** (0.0300)
<b>Agent lives within farmer's community</b>			-0.0447*** (0.0091)	-0.0441*** (0.0091)	-0.0393*** (0.0090)
<b>Agent's experience (in months)</b>				0.0016*** (0.0003)	0.0023*** (0.0003)
<b>Number of producers covered by agent</b>					-0.0025*** (0.0002)

Notes: Additional control variables included in all regressions for which coefficients are not reported: child's age and sex, number of household members, whether household head and spouse can read and write, whether household is headed by a woman, whether community has a primary school and electricity grid access and whether community is accessible by road all year. Marginal effects show by how much the rate of child labour identification changes with an incremental change in each of the agent characteristics. \*\*\* p<0.01, \*\* p<0.05, \* p<0.1; standard errors in parenthesis.

Data source: ICI-implemented CLMRS in Côte d'Ivoire.

<sup>38</sup> From anecdotal evidence, we know that some agents who have been in this role for a very long time lose motivation, which may also imply a decrease in their child labour identification rate. However, our data does not allow us to establish such a dynamic in quantitative terms, because the number of interviews conducted by agents with long experience is relatively small (less than 3% of the interviews were conducted by agents with more than 3 years of experience).

**Figure 8: Agent characteristics affecting the likelihood of identifying cases of child labour.**



## What we conclude and recommend

In any CLMRS set-up, the agents in charge of data collection play a crucial role in achieving some of the system's most important outcomes. In the ICI CLMRS model, monitoring agents constitute the primary point of contact between the CLMRS and the farmer. They explain the objectives of the system and conduct basic awareness-raising with all farmers. Even if agents receive very similar training packages on child labour, interview techniques, CLMRS questionnaires and child safeguarding, each agent brings to this job their personal skills, talent, experience, social capital within the community and a level of commitment, which will have a strong impact on the outcomes of their monitoring work.

The regression results suggest some systematic patterns with regard to what profiles of locally based monitoring agents are particularly effective at identifying cases of child labour through household visits. The most salient conclusions from the available data are that **female agents are more effective than their male colleagues and that agents with higher education levels are more effective than those with primary education only**. There is also some evidence that **with experience, agents become better at identifying cases of child labour** (although the effect of accumulating experience is relatively weak, potentially because it is counterbalanced by other effects such as decreasing motivation for the job or fading of the effect of initial training). The **likelihood of identifying cases of child labour also decreases slightly on average as agents cover more farmers**, which may be because they have less time available for each visit.

The analysis shows that female agents are more effective at identifying child labour cases than their male colleagues, and that agents with higher levels of education are more effective than those who have only been to primary school.

In the context of the standard ICI CLMRS model, where community members trained as monitoring agents interview farming families within their own or neighbouring communities about child labour use, the data shows that agents are slightly more likely to identify cases of child labour *outside* of their own communities (even though the difference is rather small). One possible interpretation is that if the agent knows a farmer well because they live in the same community, this poses a slight disadvantage to the chance that the interview will detect cases of child labour. However, it is important to note that if we compare child labour identification rates across CLMRS models working with different types of monitoring agents (community members, cooperative staff, hired enumerators),

there is no clear pattern to show that community outsiders are more effective at child labour identification than community members. This is because the effect of agent types is overlaid with other differences across the CLMRS models from which we have data. To conclude, **there is indicative evidence that community outsiders may be slightly better positioned to detect cases of child labour than community members, but the available data does not allow us to draw clear conclusions on this question. Additional qualitative research should be undertaken in order to better understand the dynamics involved in agents monitoring child labour use in their own communities and to optimise CLMRS arrangements accordingly.**

## BOX 2

## Women as change agents in PMI's ALP programme

**In the implementation of its ALP programme (for more details see Box 1), PMI recognised that women can take on important roles as positive agents of change, but they can also be a vulnerable group in many rural environments.**

As a core element of the ALP programme, field technicians in countries where PMI sources tobacco verify farmers' compliance to the ALP Code by conducting farm-by-farm monitoring. They engage with farmers and workers to ensure that practices that are not aligned with the Code are identified and addressed. Agronomy as a profession has been traditionally and predominantly performed by men. In spite of this, and even though women are in many contexts facing various challenges as field technicians, PMI increasingly supports the involvement of women both on the field and in supervisory roles. PMI values the additional gender sensitive insights and expertise that women can bring to a team, particularly in engaging openly with female farmers, workers and family members.

As an example, PMI's local affiliate in Pakistan found that male field technicians were unable, due to cultural paradigms, to directly engage with women on the farms. This is why, in 2019, they deployed a team of 10 women ("ALP Monitors") to raise awareness about ALP standards. The team engaged with over 250 women across 250 farms mostly through house visits

and recorded significant improvements, especially in safe working practices. However, despite the positive experience in some markets, it remains a challenge to attract women for the role of field technicians.

PMI also recognises that women are agents of change in the fight against rural poverty and child labour. Women are known for being more open to learning and changing, especially when it comes to issues related to their children's well-being and safety in general. When they are engaged in awareness-raising programmes, they pass on learnings to their families and influence them toward a safer and more inclusive work environment without child labour. Based on these learnings, PMI included women's empowerment as one of the guiding principles on ALP Step Change and rolled out targeted initiatives for women farmers and workers such as trainings, village savings and loan associations and supporting the establishment of small-scale businesses.

For more information, please see [Agricultural Labor Practices Progress Update – Empowering Women for Change \(PMI – Philip Morris International\)](#).

However, the results allow for the following recommendations for CLMRS project managers, in terms of agent recruitment and work arrangements with agents:

- A secondary education level should feature amongst the key selection criteria when monitoring agents are recruited. If qualified candidates with secondary education are difficult to mobilise, additional training to strengthen relevant skills, or additional supervision and support, might be provided for agents with lower education levels.
- Efforts should be made to recruit and retain more female monitoring agents, which has proven to be challenging in practice. ICI is planning to explore in a follow-up study which recruitment channels, work arrangements and support measures can be employed to help reach this objective.
- Community-based agents should be helped to reach farming households outside of their own community (e.g. by ensuring they have bicycles or motorcycles at their disposal or by paying transport allowances).
- The number of farmers covered by an agent should be set in accordance with the time the agent can dedicate to the job, to ensure that agents have a realistic time budget available to conduct each monitoring visit with due care.
- Agents should be incentivised to stay in the job after they have acquired experience.

There are of course many agent characteristics which may be at least as important as the ones examined here, but which are difficult to measure and not captured in our data (such as, the agent's ability to gain children's trust, his or her social standing and reputation within the community and his or her relationships built with individual farmers). Also, the insights here apply only to the context of a CLMRS model which uses community-based agents for child labour monitoring and are based on data from Côte d'Ivoire only.

Box 2 presents experience by PMI's under their Agricultural Labour Practices (ALP) programme, where the effectiveness of the programme could be enhanced by training women as field technicians and recognising women's role as change agents within the family and the community.

### IN A NUTSHELL

- The likelihood that a community-based agent identifies a case of child labour through a monitoring visit varies with their demographic profile and work experience.
- Community-based agents with at least secondary education, as well as female agents, are more effective at identifying cases of child labour.
- Agents are also more effective when they are more experienced in doing monitoring interviews and when they cover fewer farming households.
- Agents are slightly more effective in identifying cases of child labour when they visit farming households outside their own community, an observation to be followed up with more qualitative research to understand why this is the case.
- These results are applicable only to the context of CLMRS models working with locally based agents. The available data does not allow us to compare across CLMRS models with different types of agents hired for monitoring, such as cooperative staff or external enumerators visiting the community only for data collection.

# Analysis Part B:

## Stopping children from doing hazardous work

How likely are child labourers identified by a CLMRS to stop working?	57
Does exposure to hazardous work decrease for child labourers identified by a CLMRS?	62
Does school participation improve for child labourers identified by a CLMRS?	66
Which contextual factors are related to whether children stop doing hazardous work once identified by a CLMRS?	68
How do different types of remediation support perform in comparison, in terms of stopping children from doing hazardous work?	72
How do different types of school-related remediation perform in comparison, in terms of increasing school participation?	81

How likely are child labourers identified by a CLMRS to stop working?

### SUMMARY

#### Data source

- Data from follow-up visits to children previously identified in hazardous child labour under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

- Summary statistics.

#### Indicators / key concepts / definitions

- Follow-up visit: under the ICI CLMRS model, after a child has been identified in child labour and received a remediation, the monitoring agents make follow-up visits to the child in intervals of 3–6 months to check whether the child has stopped to do hazardous work.
- Child has stopped doing hazardous work: a child previously identified in child labour has claimed to no longer be doing hazardous work during two consecutive follow-up visits.

#### Caveats

- Sequences of follow-up visits available for this review only from ICI-implemented CLMRS in Côte d'Ivoire. The validity of results for other contexts may be limited.
- Few children in the data base with a history of child labour, who received remediation and stopped hazardous work as confirmed by two follow-up visits, were then visited again after the second follow-up visits. It is therefore difficult to derive from this data a benchmark criterion to declare a child has definitely stopped hazardous work.

## The method we use

We examine the evolution of identified cases of child labour over a sequence of follow-up visits under ICI-implemented CLMRS in Côte d'Ivoire.<sup>39</sup> Children identified in hazardous child labour under the ICI CLMRS typically receive one or more types of remediation support (assistance, goods or services) tailored to their needs shortly after their case has been identified,<sup>40</sup> and are then visited again by the monitoring agent in intervals of typically 3 to 6 months. During these follow-up visits, the agent asks the child whether they continue to engage in hazardous work and whether they go to school. These follow-up visits continue until the child has claimed to no longer be engaging in hazardous work during two consecutive visits. The child is then considered to "have stopped doing hazardous work" under the ICI CLMRS model, and would shift back from the closer follow-up visits to the normal cycle of annual monitoring visits. If the child continues to do hazardous work, the agent will continue to do follow-up visits every 3–6 months.

For all ICI-implemented CLMRS projects in Côte d'Ivoire, the data base contains complete **follow-up visit records from a total of 16,869 children aged 5–17 who had previously been identified in child labour** (including records up to January 2020). Of these, 6,654 children have only had one follow-up visit; the remaining **10,215 children had at least two follow-up visits. This is the sample of children on which we can examine the effectiveness of the CLMRS in stopping child labourers from doing hazardous work.**

## What we find

Of the 16,869 children previously identified in hazardous child labour and followed up under ICI-implemented CLMRS in Côte d'Ivoire, **38% reported no longer doing hazardous tasks during their first follow-up visit.** As explained above, most of these children had more than one follow-up visit. When we take all follow-up visits into consideration, we find that **54% of children previously in child labour reported no longer doing hazardous tasks during one of the follow-up visits** (table 4).

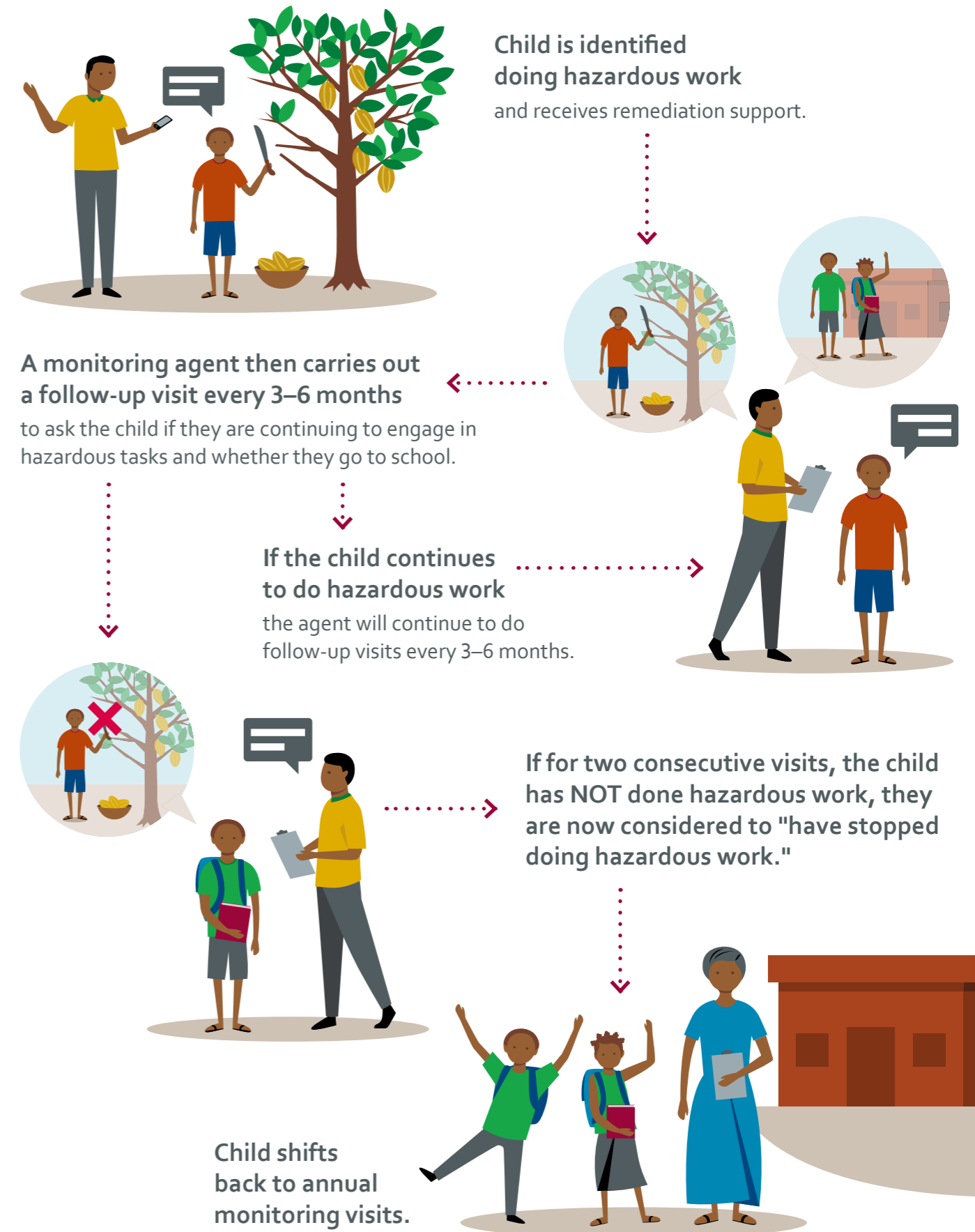
We can also see in the data that it is not uncommon for children to **switch back and forth between doing and not doing hazardous work from one visit to the next.** Among all child labourers who during one follow-up visit reported no longer doing hazardous tasks, 24% again reported doing hazardous tasks during a subsequent visit. Hence, when a child previously in child labour declares not doing hazardous tasks at one follow-up visit, while this is a temporary improvement of the situation, it is not sufficient to consider the case of child labour to be resolved.

When we apply a criterion of **not having reported any hazardous work for at least two consecutive follow-up visits, we find that 29% of the children previously in child labour have stopped engaging in hazardous work under ICI-implemented CLMRS in Côte d'Ivoire.**

<sup>39</sup> Sequences of follow-up visits to a sufficient number of children were available for this review only from ICI-implemented CLMRS in Côte d'Ivoire, which have been in place for several years and use a data management system which allows the tracking of individual children.

<sup>40</sup> How much time elapses after a child has been identified in child labour until the child receives a remediation depends on the local context: if the child's circumstances allow, ICI technical agents wait for data from a critical number of children from the same community coming in to select an appropriate remediation service and allow for collective delivery.

## Identification and follow-up of children in child labour



**Table 4: Rates of children previously identified in hazardous child labour under ICI CLMRS in Côte d'Ivoire who have stopped working over the course of follow-up visits.**

	# of children	Rate within relevant subset of child labourers
Children previously in hazardous child labour and followed up with at least 1 visit	16,869	
Children previously in hazardous child labour and followed up with at least 2 visits	10,215	
Children previously in hazardous child labour who were not doing hazardous work during the first follow-up visit	6,365 (of 16,896 children with at least one follow-up visit)	38%
Children previously in hazardous child labour who were not doing hazardous work during the most recent follow-up visit	8,193 (of 16,896 children with at least one follow-up visit)	49%
Children previously in hazardous child labour who were not doing hazardous work during 2 consecutive follow-up visits (i.e. children who stopped doing hazardous work)	2,981 (out of 10,215 children with at least two follow-up visits)	29%
Children previously in hazardous child labour who were not doing hazardous work during one (or more) follow-up visit(s)	9,044 (of 16,896 children with at least one follow-up visit)	54%

Under the ICI-implemented CLMRS, a child who has reported not doing hazardous tasks during two consecutive follow-up visits is shifted back to a regular monitoring cycle with less frequent visits. In the ICI CLMRS data base for Côte d'Ivoire, there are 880 children who have a history of child labour, have stopped doing hazardous work after a sequence of follow-up visits, were still below the age of 18 and were visited again at least once under the regular monitoring cycle. Of these 880 children, **20.5% were found to have fallen back into hazardous child labour again. However, if we apply an additional criterion that at least 3 months must have elapsed between the last visits, the share is reduced to 16.3%.**

It is not uncommon for children to switch back and forth between doing and not doing hazardous work from one visit to the next. Because of this, one follow-up visit is not sufficient to consider the case of child labour to be resolved.



## What we conclude and recommend

The sequences of visits to individual children provide a valuable data source to help understand the dynamics of child labour in the context of CLMRS in cocoa production. First of all, the data shows that children who appear to be out of child labour during one visit may again be found in child labour when visited a few months thereafter. Our first key conclusion from the data is that **more than one follow-up visit is needed to verify that a child has stopped hazardous work** after having received remediation support. The data does not yield a clear recommended benchmark on the number of follow-up visits and the minimum time period of close follow-up. Under the ICI-implemented CLMRS in Côte d'Ivoire, when children report no longer doing hazardous work during two consecutive follow-up visits, the risk of falling back into hazardous child labour thereafter is only 21% (note that this estimate is based on a sample of only 880 children).

**More than one follow-up visit is needed to verify that a child has stopped hazardous work.**

### IN A NUTSHELL

- More than one follow-up visit is needed to verify that a child has stopped hazardous work after having received remediation support.
- Sequences of visits to individual children provide valuable insights into the dynamics of child labour in the context of CLMRS in cocoa production.
- Under the ICI-implemented CLMRS in Côte d'Ivoire, among previous child labourers who no longer report doing hazardous work during two consecutive follow-up visits, the risk of falling back into hazardous child labour thereafter is around 21%.

## Does exposure to hazardous work decrease for child labourers identified by a CLMRS?

### SUMMARY

#### Data source

- Data from follow-up visits to children previously identified in hazardous child labour under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

- Summary statistics.

#### Indicators / key concepts / definitions

- Number of different hazards to which a child is exposed.
- Number of hours a child works on working days.
- Number of days a child works per week.

#### Caveats

- Sequences of follow-up visits available for this review only from ICI-implemented CLMRS in Côte d'Ivoire. The validity of results for other contexts may be limited.
- Further work is needed to develop tools to measure the severity and intensity of child labour currently available and used under CLMRS.

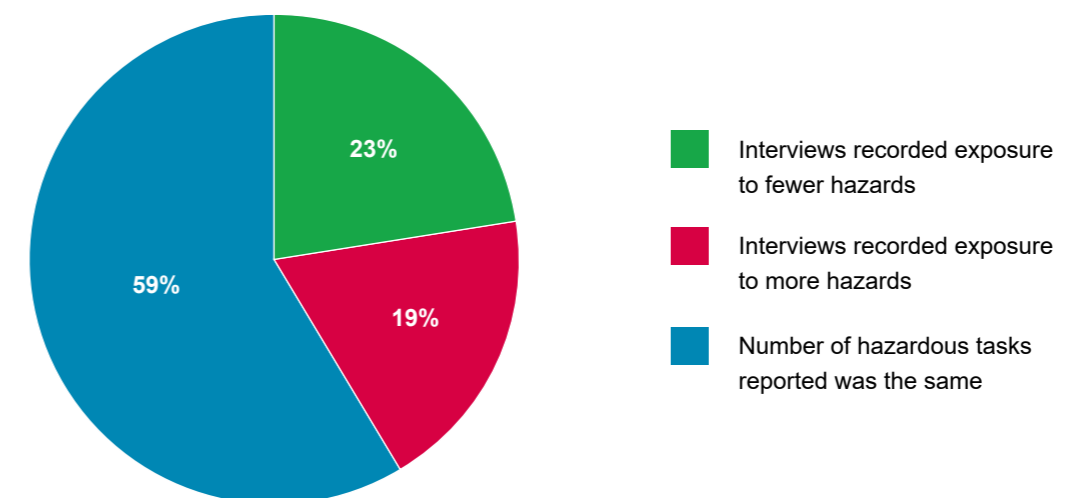
## The method we use

We take a closer look at child labourers identified under the ICI-implemented CLMRS in Côte d'Ivoire **who continue doing hazardous work** after they have received remediation, to check **if their child labour situation is found to be alleviated, even if not fully resolved**. Our data allows us to check progress on a limited set of indicators of child labour severity or intensity: the number of different hazards to which children are exposed, the number of hours a child reports to work on working days and the number of days a child reports to work per week.<sup>41</sup> For each of these indicators, we check for each follow-up visit whether the situation of the child has improved (i.e. the child is exposed to less hazards or works less hours or days), remained the same or deteriorated (i.e. the child is exposed to more hazards or works more hours or days), compared to the previous visit. To check for progress in terms of hours worked per day, and days worked per week, we include only children aged 10 years or older at the time of the interview. This is because it is very difficult for younger children to provide reliable estimates of the time they have spent doing a certain activity during a given reference period.

## What we find

Child labourers identified under ICI-implemented CLMRS in Côte d'Ivoire report being exposed to 1–13 different hazardous tasks when working on the cocoa field, with an average of around 2 different hazardous tasks. **If a child labourer followed up under the CLMRS continues to do hazardous work, their exposure to different hazardous tasks decreases slightly on average from one visit to the next.**<sup>42</sup> Across all follow-up visits where children reported that they continued to do hazardous work (4,750 visits), **23%** of the interviews recorded exposure to **fewer** hazards as compared to the previous visit and **19%** of the interviews reported exposure to **more** hazards (for the remaining 59% of visits, the number of hazardous tasks reported was the same) (figure 9).

**Figure 9: Across all follow-up visits where children reported that they continued to do hazardous work (4,750 visits).**



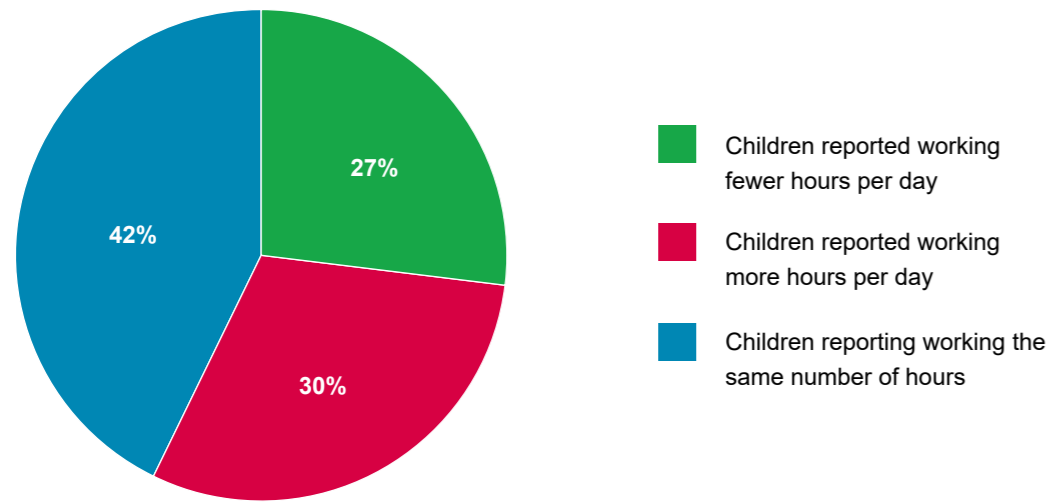
<sup>41</sup> For hours and days worked on hazardous tasks, the questions are asked differently when the household is first visited to identify any potential cases of child labour than during follow-up visits to children previously identified in hazardous child labour.

<sup>42</sup> We also include here only cases of child labour identified after August 2018, which is when the government of Côte d'Ivoire revised the list of hazardous tasks.



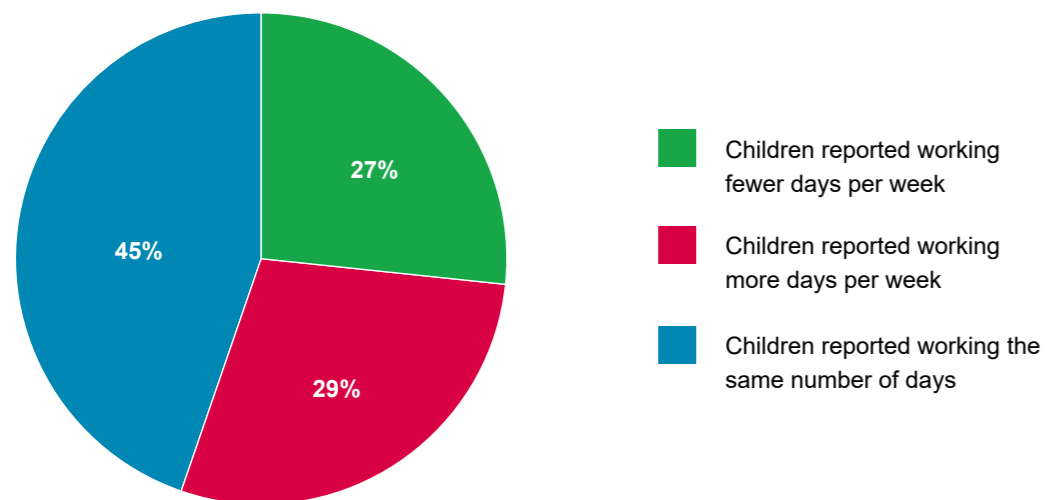
Next, we look at the number of hours children reported working on a working day, which is on average 3.2 hours for those children who continue to do hazardous tasks and who are at least 10 years old. From a total of 3,920 visits, during **27%** of visits children reported **working fewer hours per day** as compared to the previous visit, as against **30%** of visits where children reported **working more hours** (for the remaining 42.4% of visits children worked the same number of hours) (figure 10).

**Figure 10: Number of hours children who continue to do hazardous tasks and who are at least 10 years old reported working each workday.**



To check progress on the number of days worked per week by children who continue to do hazardous tasks, we again include only children who are at least 10 years of age. On average, working children in the sample of children above the age of 10 followed up under the ICI-implemented CLMRS in Côte d'Ivoire report to work on three days per week. From a total of 3,907 visits for which this information is available, during **27%** of visits children report working on **fewer** days per week, as against **29%** of visits where children report working on **more** days per week, compared to the previous visit (for the remaining 45% of visits children reported working the same number of days) (figure 11).

**Figure 11: Number of days children who continue to do hazardous tasks and who are at least 10 years old reported working per week.**



## What we conclude and recommend

We find that under the ICI-implemented CLMRS in Côte d'Ivoire, **children who continue to do hazardous work are exposed to fewer different types of hazard** when followed up, but that on average, there **no reduction in how often and for how long they work**. However, this average masks differences from one case to another: almost one in three children report a reduction in the number of hours or days worked, whereas for another one in three children, the number of hours or days worked has increased over time.

CLMRS can help not only to identify whether a child is in child labour or not, but also **to monitor the extent to which they are exposed to hazards**. Tools to measure, and concepts to classify levels of child labour severity and intensity still need to mature, but **CLMRS implementers should make efforts to further develop and improve the respective modules in the data collection tools**, for example by asking for information on the number of tasks, hours and days worked. Given that many children move frequently from “in child labour” to “not in child labour” and then back into child labour again, it is important that a CLMRS allows us to understand individual cases in more detail and to differentiate between more severe and less severe cases.

### IN A NUTSHELL

- Children who continue to do hazardous work experience a slight reduction in the number of hazardous tasks they do, but on average, we see no reduction in how often nor for how long they work.
- Some children's child labour situation improves over time while for others it becomes more severe.
- CLMRS should monitor not only whether or not a child is in hazardous child labour, but distinguish between more severe and less severe cases.
- CLMRS should be able to identify cases where the severity and intensity of child labour increases over time and to prioritise these children for support.



## Does school participation improve for child labourers identified by a CLMRS?

### SUMMARY

#### Data source

- Data from follow-up visits to children previously identified in hazardous child labour and out of school under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

- Summary statistics.

#### Indicators / key concepts / definitions

- Child is out of school: child currently not enrolled in school, includes children who were never enrolled in school and those who dropped out.
- Child brought into schooling: child has been enrolled in school during two consecutive follow-up visits.

#### Caveats

- Sequences of follow-up visits available for this review only from ICI-implemented CLMRS in Côte d'Ivoire. The validity of results for other contexts may be limited.

### The method we use

We assess how children's school participation evolves while children are being monitored and receiving remediation support under the CLMRS. We use data from ICI-implemented CLMRS in Côte d'Ivoire, which provide sequences of follow-up visits for a substantial number of children. Under these CLMRS, a total of 4,472 **children identified in hazardous child labour were out of school** at the same time. Amongst these, we pay special attention to children of primary school age (12 years or younger), and we distinguish between those living in communities with a primary school present (1,217 children) and those living in communities with no primary school present (673 children). For each of these children, we check whether by the time of a follow-up visit they have started going to school. Similar to the criterion of whether a child has stopped hazardous work, we also apply the criterion of whether a child is enrolled in school during two consecutive follow-up visits. We have data from **882 primary-school age children** previously in hazardous child labour and out of school who then had **at least two follow-up visits**.

### What we find

For context, **school enrolment is at the same level amongst child labourers as amongst non-child labourers**: amongst **all children identified in hazardous child labour** under the ICI-implemented CLMRS in Côte d'Ivoire, around **73% are enrolled in school**, as against 72% amongst children not in hazardous child labour.

Amongst all children identified in hazardous child labour and out of school under ICI-implemented CLMRS in Côte d'Ivoire, **18% had started going to school by the first follow-up visit**. Within the same sample but including only **children of primary school age (12 years or younger) living in communities with a primary school present**, **26% had started going to school by the first follow-up visit, while 31% were in school during the most recent follow-up visit**. **Amongst those who had at least two follow-up visits or more, 20% were going to school during two consecutive visits**.

In communities where no primary school is present, the corresponding rates are lower, but still remarkably high: amongst primary school age children previously identified in hazardous child labour and out of school at the same time, but living in a community with **no primary school present**, **19.5% had started going to school by the first follow-up visit and 24% by the most recent visit**. **Amongst those who had at least two follow-up visits, 14% were going to school during two consecutive visits**.

**18% of out-of-school identified in child labour had (re)started attending school by their first follow-up visit.**

### What we conclude and recommend

For child labourers who are out of school, CLMRS generally aim not only to address their engagement in hazardous work, but also to improve their access to education. For the ICI-implemented CLMRS in Côte d'Ivoire, we find considerable achievements in terms of improving school participation amongst child labourers, **with around one in four out-of-school child labourers starting to go to school under the system**. Nevertheless, CLMRS effectiveness in terms of bringing children to school falls short of its success in terms of stopping children from doing hazardous work.

**Exposure to work-related hazards and at the same time being deprived of schooling makes a child particularly vulnerable and in need of support**. The following recommendations emerge:

- CLMRS data collection tools should include questions to determine a child's schooling status.
- Children in child labour and out of school should be prioritised for support.
- The ability of CLMRS to help out-of-school children back into school should receive more emphasis in communication and reporting. Improvement of children's access to education should also be included as a key performance indicator of a CLMRS.

### IN A NUTSHELL

- CLMRS aim to improve children's access to several fundamental rights (education, identity, etc.), as well as to address child labour.
- Children who are in child labour and out of school at the same time are particularly vulnerable and should be prioritised for support under CLMRS.
- Achievements in terms of school enrolment should be given more attention in CLMRS communication and reporting, and they should feature among key CLMRS performance indicators.

## Which contextual factors are related to whether children stop doing hazardous work once identified by a CLMRS?

### SUMMARY

#### Data source

- Data from follow-up visits to children previously identified in hazardous child labour under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

- Logit regression.

#### Indicators / key concepts / definitions

- Child has stopped doing hazardous work: a child previously identified in child labour has claimed to no longer be doing hazardous work **during two consecutive follow-up visits.**

#### Caveats

- Sequences of follow-up visits available for this review only from ICI-implemented CLMRS in Côte d'Ivoire. The validity of results for other contexts may be limited.



## The method we use

We examine which characteristics of the child, the household or the community affect how likely it is that children stop doing hazardous work under CLMRS. We use sequences of follow-up visits under ICI-implemented CLMRS in Côte d'Ivoire.<sup>43</sup> For a child previously identified in hazardous child labour, we define “having stopped hazardous work” as not having done hazardous tasks for at least two consecutive follow-up visits. Since several factors are at play in parallel and may act in combination, we use a logit regression model specified as follows:

- Units of observation are children previously identified in hazardous child labour.
- The dependent variable is whether a child has stopped doing hazardous work.
- As explanatory variables we include:
  - the child's age and sex
  - whether the child was enrolled in school at the time they were identified in hazardous child labour
  - whether the child is living with at least one biological parent
  - whether the child has older siblings
  - the number of household members (indicator variables for whether the household has up to 5, 6–10, or more than 10 members)
  - whether the head of household and the spouse of the head of household can read and write
  - whether the household is headed by a woman
  - whether there is a primary school in the community
  - whether the community is accessible by road all year round
  - whether the community is connected to the electricity grid

We sequentially add these child, household and community characteristics to the regressions in order to spot potential instances of multicollinearity.

<sup>43</sup> Sequences of follow-up visits to a sufficient number of children were available for this review only from ICI-implemented CLMRS in Côte d'Ivoire, which have been in place for several years and use a data management system which allows the tracking of individual children.

## Around 30% of child labourers identified by the system stop doing hazardous work.

### What we find

Overall, 29.2% of children stop hazardous work (defined as not doing hazardous work during two consecutive follow-up visits), when we look at the sample of children identified in hazardous child labour under ICI-implemented CLMRS in Côte d'Ivoire and followed up with at least two consecutive visits.

The regression results show several factors which have a statistically significant effect on the likelihood of a child stopping hazardous work:

- **Girls are more likely** than boys, by around 2 percentage points, to stop hazardous work.
- Children who were **in school at the time they were identified in child labour are more likely**, by around 3 percentage points, to stop hazardous work.
- Children **living with at least one biological parent are more likely**, by around 4 percentage points, to stop hazardous work.
- Children who have **older siblings are less likely**, by around 2 percentage points, to stop hazardous work.
- **The presence of a primary school in the community increases** the likelihood that children stop hazardous work by around 3 percentage points.

Other factors included in the regression do not have statistically significant effects. This does not mean that they are irrelevant, but rather that we cannot be sufficiently confident from the data whether and by how much they affect the likelihood that children stop hazardous work under the CLMRS.

## What we conclude and recommend

The data points to a number of factors which make it **less likely** that a child can be stopped from doing hazardous work. The factors are broadly in line with empirically established risk factors for child labour more generally. If children are in child labour and also out of school, not living with their biological parents (e.g. children living with relatives or adopted children), have older siblings or do not have access to a primary school in the community, **these children will need extra attention and effort for remediation**. If a CLMRS identifies cases of child labour coupled with one or more of these risk factors, **it should have a mechanism to flag these cases to ensure that these children receive appropriate remediation and are followed up closely**.

It is important to note however that these factors are *associated* with the likelihood of children stopping hazardous work, but they may *not* necessarily reveal a *causal* effect on the success of the CLMRS. Conclusions about causal relationships between the chance that a CLMRS stops children from hazardous work and any of these factors require (quasi-) experimental methods which have not yet been applied in the specific context of CLMRS.

Box 3 presents an example of how data collected under PMI's CLMRS in the tobacco sector has been triangulated with data from other sources to better understand root causes of child labour use and obstacles to addressing it, as well as to improve awareness-raising messaging accordingly.

### IN A NUTSHELL

- The likelihood that children stop doing hazardous work in response to remediation support received under the CLMRS changes according to contextual factors.
- Specifically, the likelihood of stopping hazardous work is higher for **girls than for boys**, for children who were **in school at the time they were identified in child labour**, for children **living with at least one biological parent** (as opposed to children living with relatives or adopted children, for example), for children who do not have **older siblings** and for children living in a community with a **primary school present**.
- Even if some of these factors are not causal, **they indicate which children will need extra attention and efforts for remediation**. A CLMRS might apply a **mechanism to flag these cases to ensure that they receive appropriate remediation and are followed up closely**.

### BOX 3

## Making full use of data from CLMRS by triangulating them with other data sources – PMI's experience

**Under its Agricultural Labour Practices (ALP) programme (for more details see Box 1), working conditions of farmers supplying tobacco to PMI are systematically monitored by field technicians. As a primary source of data, field technicians collect information during their farm visits to build farm profiles and register practices that are not aligned with the ALP Code standards, as well as remediation steps and action plans.**

To make full use of this data, PMI has started triangulating it with information from other sources, such as external assessments and grievance mechanisms, to better understand some of the underlying causes of the labour rights issues. PMI recommends triangulating data emerging from the CLMRS with data provided by community structures, workers' or farmers' associations, other civil society organisations and government, in order to build a full picture of the reality on the ground and the main risks. Concretely, the data that is collected from external assessments and from public sources is used internally, to quantify the potential risk of child labour that may not be captured by the farm by farm monitoring (given that field technicians are only present on the farms for a limited amount of time and the issues identified are often systemic).

On the other hand, PMI combines qualitative data (collected through participatory methods) to assess the effectiveness of initiatives on the ground and their impact on addressing the root causes of child labour. A representative example is the external verification performed in Indonesia. One of the key findings is that child labour is seen as part of a widespread societal norm of communal work (*gotong royong*). Strong cultural beliefs ingrained in the society, including those held by some local leaders, educators and community representatives, potentially weaken the company's messaging about child labour. This insight reinforced PMI's understanding of the root causes of child labour, leading them to introduce and redesign initiatives including training and awareness-raising.



## How do different types of remediation support perform in comparison, in terms of stopping children from doing hazardous work?

### SUMMARY

#### Data source

- Data from follow-up visits to children previously identified in hazardous child labour under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

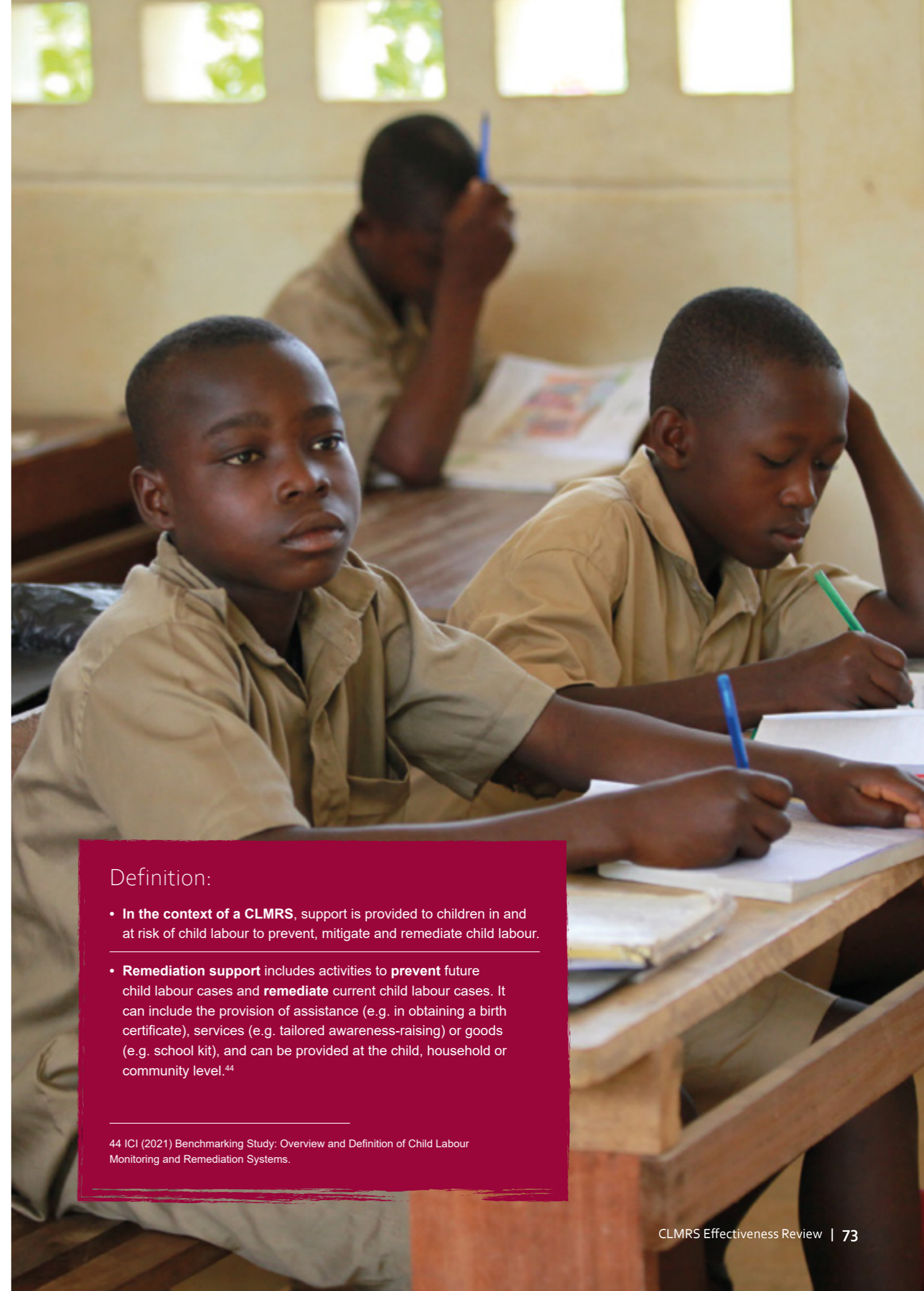
- Logit regression.

#### Indicators / key concepts / definitions

- **Child has stopped doing hazardous work:** a child previously identified in child labour has claimed to no longer be doing hazardous work during two consecutive follow-up visits.
- **Types of remediation:** See [Appendix A](#) for an overview and description of types of remediation provided under CLMRS in the cocoa sector.

#### Caveats

- Sequences of follow-up visits available for this review only from ICI-implemented CLMRS in Côte d'Ivoire. The validity of results for other contexts may be limited.
- An appropriate remediation type is typically chosen for each child based on the child's profile and specific needs, which, as such, drive chances for a child to stop hazardous work. Therefore, the relationship we observe between receiving a certain remediation type and stopping hazardous work is not necessarily causal.



#### Definition:

- **In the context of a CLMRS,** support is provided to children in and at risk of child labour to prevent, mitigate and remediate child labour.
- **Remediation support** includes activities to **prevent** future child labour cases and **remediate** current child labour cases. It can include the provision of assistance (e.g. in obtaining a birth certificate), services (e.g. tailored awareness-raising) or goods (e.g. school kit), and can be provided at the child, household or community level.<sup>44</sup>

<sup>44</sup> ICI (2021) Benchmarking Study: Overview and Definition of Child Labour Monitoring and Remediation Systems.

## The method we use

We examine how the chance of a child stopping hazardous work is associated with the type of remediation support the child (or the child's family or community) received under the CLMRS. We use sequences of follow-up visits under ICI-implemented CLMRS in Côte d'Ivoire.<sup>45</sup> As in previous sections, we define "having stopped hazardous work" as a child previously identified in hazardous child labour not having done hazardous tasks for at least two consecutive follow-up visits. For obvious reasons, we also consider for this analysis only remediation services the child received before the relevant follow-up visit took place.

We use a [logit regression model](#) specified as follows:

- Units of observation are children previously identified in hazardous child labour.

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- The dependent variable is whether a child has stopped doing hazardous work.

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- The explanatory variables of interest are indicators of whether the child has received a certain type of remediation, taking into account that many children have received more than one type of remediation.

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- As control variables we include:
  - the child's age and sex (unless we split the sample by sex)
  - whether the child was enrolled in school at the time they were identified in hazardous child labour
  - whether the child is living with at least one biological parent
  - whether the child has older siblings
  - the number of children living in the household
  - whether the head of household and the spouse of the head of household can read and write
  - whether the household is headed by a woman
  - the age of the head of household (as a linear and a squared term to allow for a non-linear relationship)
  - whether there is a primary school in the community (unless we split the sample by primary school presence)
  - whether the community is accessible by road all year round
  - whether the community is connected to the electricity grid

In order to better understand which remediation type has been most effective in which situation, we split the sample of children into groups: we look separately at boys and girls; at children aged 5 to 12 years (primary school age) and 13 to 17 years; and at children living in communities where a primary school is present, as opposed to in ones where no primary school is present.

<sup>45</sup> Sequences of follow-up visits to a sufficient number of children were available for this review only from ICI-implemented CLMRS in Côte d'Ivoire, which have been in place for several years and use a data management system which allows the tracking of individual children.



## What we find

Overall, **we see that remediation types aimed at improving school access and school quality appear to be particularly effective at stopping children from doing hazardous work.** When children benefit from school canteens or other improvements to schools within the community, when they have access to bridging classes and when they are provided with school kits or uniforms, they are particularly likely to stop hazardous work.<sup>46</sup> Living in communities where Community Service Groups<sup>47</sup> have been put in place or in families which receive support for income generating activities, is associated with a below-average likelihood of stopping hazardous work. In interpreting these results, we should take into account that for Community Service Groups, we have information only on whether a Community Service Group has been set up in the child's community, but not by whom the group's labour services have been requested. Similarly for income generating activities, we have information only on whether such support has been received by a household, but not on whether additional income has indeed been generated as a result.

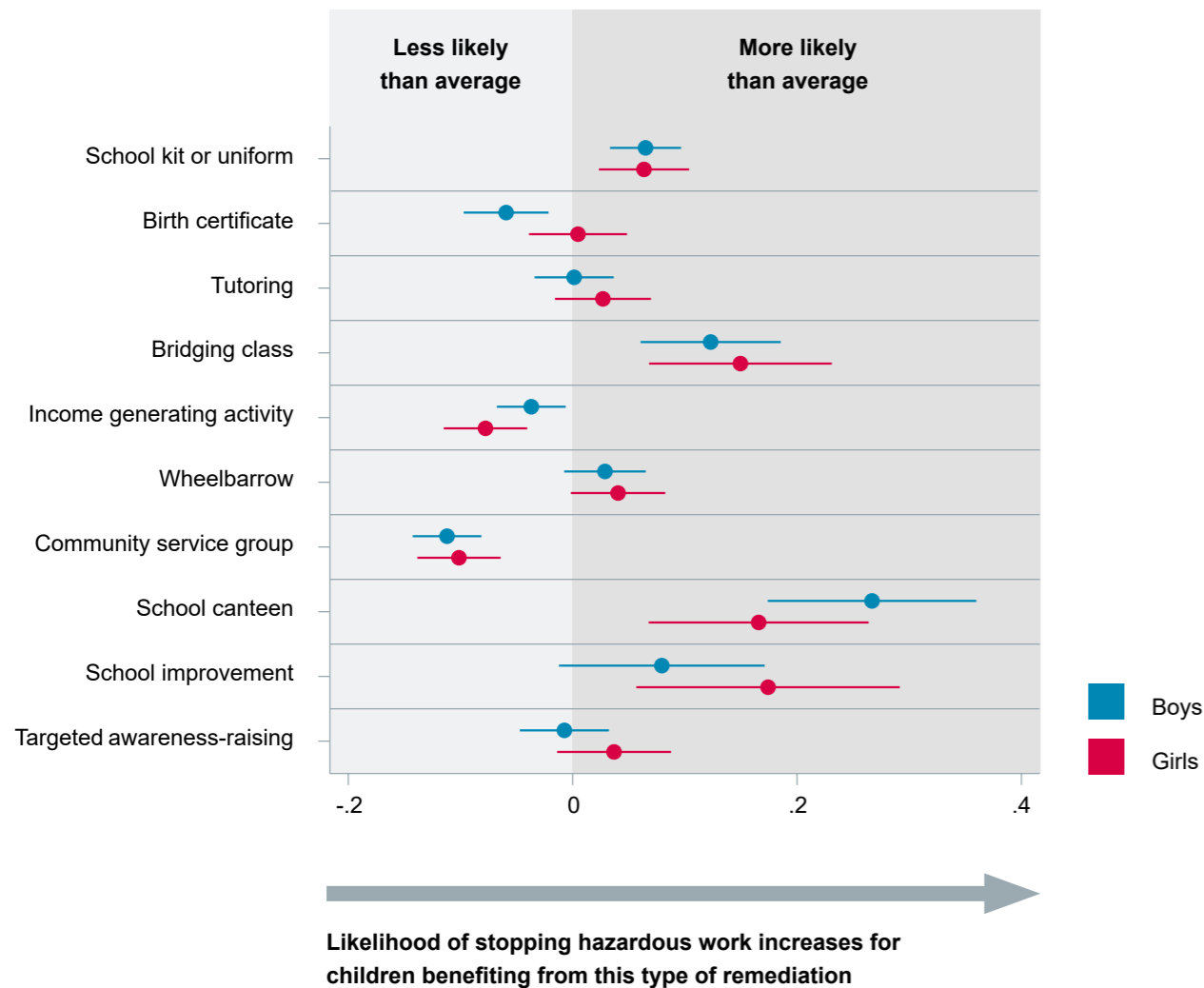
We see only minor differences between girls and boys for most types of remediation. However, there are a few exceptions: notably the provision of birth certificates, school improvements (which include, for example, the installation of toilets), bridging classes, tutoring and awareness-raising, from which girls seem to benefit more than boys. On the other hand, boys seem to benefit more from school canteens.

Figure 12 illustrates how strongly the different remediation types are associated with the likelihood **of girls (red dots) and boys (blue dots)** stopping hazardous work (after separating out the effects of other types of remediation received by the same child, as well as effects of child, household and community characteristics). Dots located further to the right indicate remediation types associated with a higher likelihood that children stop hazardous work (the dots represent marginal effects from the logit regressions specified above; see notes below the graph for full details).

<sup>46</sup> However, the effects of school-level interventions are estimated with the lowest precision (see the large confidence intervals), given that the numbers of beneficiaries in the sample are relatively small.

<sup>47</sup> A Community Service Group is a group of trained and equipped adult labourers, often youth, who provide services, such as spraying agrochemicals or land clearing, at an affordable price or sometimes even for free.

**Figure 12: By how much does the likelihood of stopping hazardous work increase for beneficiaries (boys versus girls) of different remediation types?**

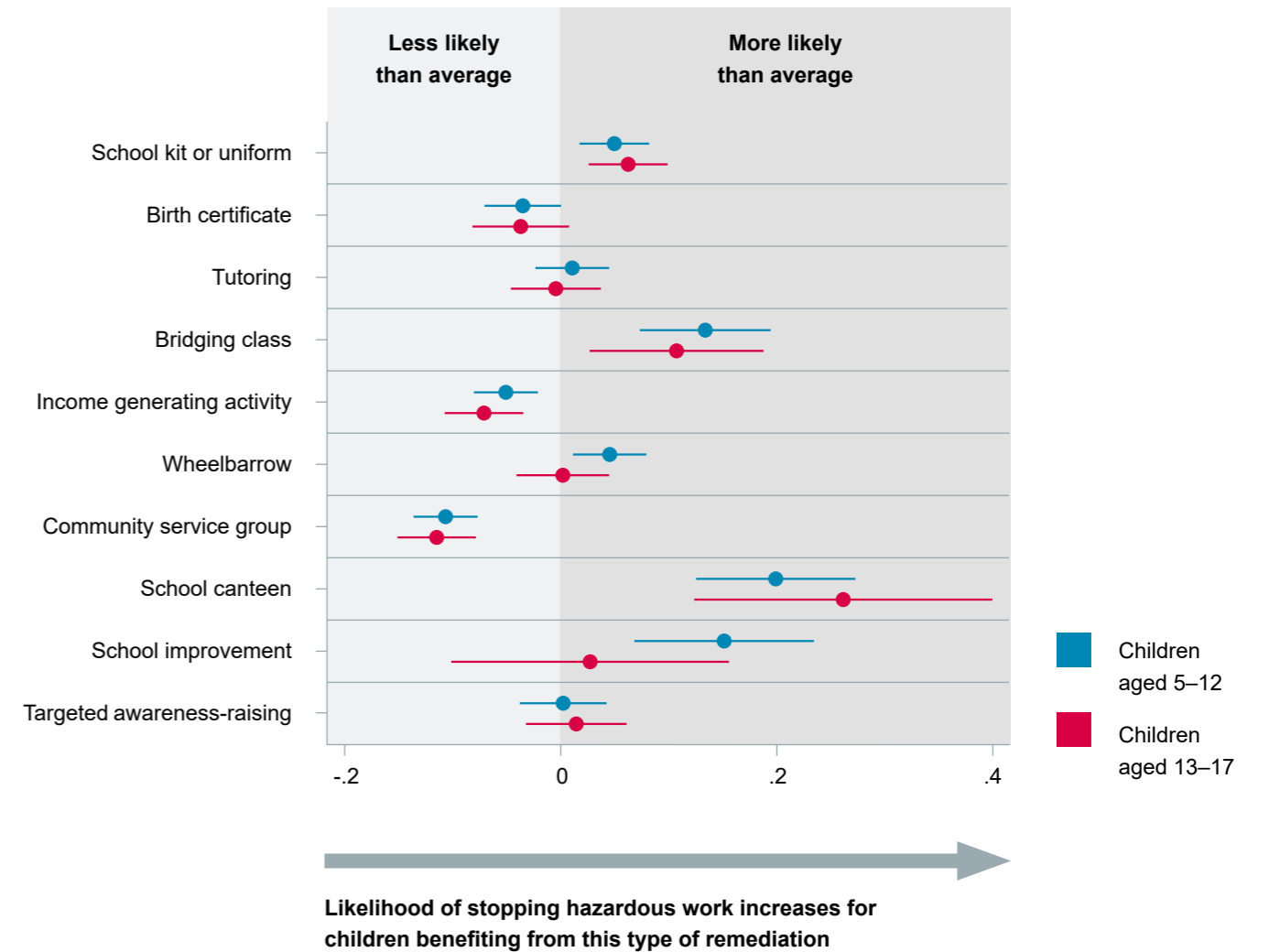


Notes: Marginal effects from a logit regression where the dependent variable is whether or not a child has stopped doing hazardous work, and the main explanatory variables are indicators for having received different types of remediation. For example, receiving a school kit or uniform has a marginal effect of approximately 0.07 for both boys and girls, indicating that for a recipient of a school kit or uniform, the likelihood of stopping hazardous child labour increases by approximately 7 percentage points, all other factors held equal. The value zero on the scale represents the average likelihood of a beneficiary stopping hazardous work, which is about 28% in this sample. All regressions also control for the child's sex and age, school enrolment at time of first visit, total number of children in household, whether the child has older siblings, whether the child is living with biological parents, whether the head of household and spouse are literate, age of the head of household (simple and squared), electricity access and primary school presence in the community. Coefficient estimates displayed only for remediation types with reasonably large samples of beneficiaries (while in the actual regressions, we included all types of remediation). Dots indicate coefficient estimates, horizontal bars indicate 95% confidence intervals for these estimates (note that the confidence intervals tend to be larger the smaller the number of beneficiaries of a given remediation type in the sample).

Data source: ICI-implemented CLMRS in Côte d'Ivoire.

Figure 13 shows differences between younger children (5–12 years) and older children (13–17 years) who receive different types of remediation. Overall, the likelihood of stopping hazardous work differs insignificantly between younger and older recipients of the various types of remediation (always relative to the average likelihood of stopping hazardous work within the age group, which as we know is higher for younger children). Only for improvements to schools does the data suggest that younger children might benefit more (even though the number of beneficiaries in both age groups in the sample is small, so that the difference is statistically not significant).

**Figure 13: By how much does the likelihood of stopping hazardous work increase for recipients (in the 5–12 or 13–17 age group) of different remediation types?**

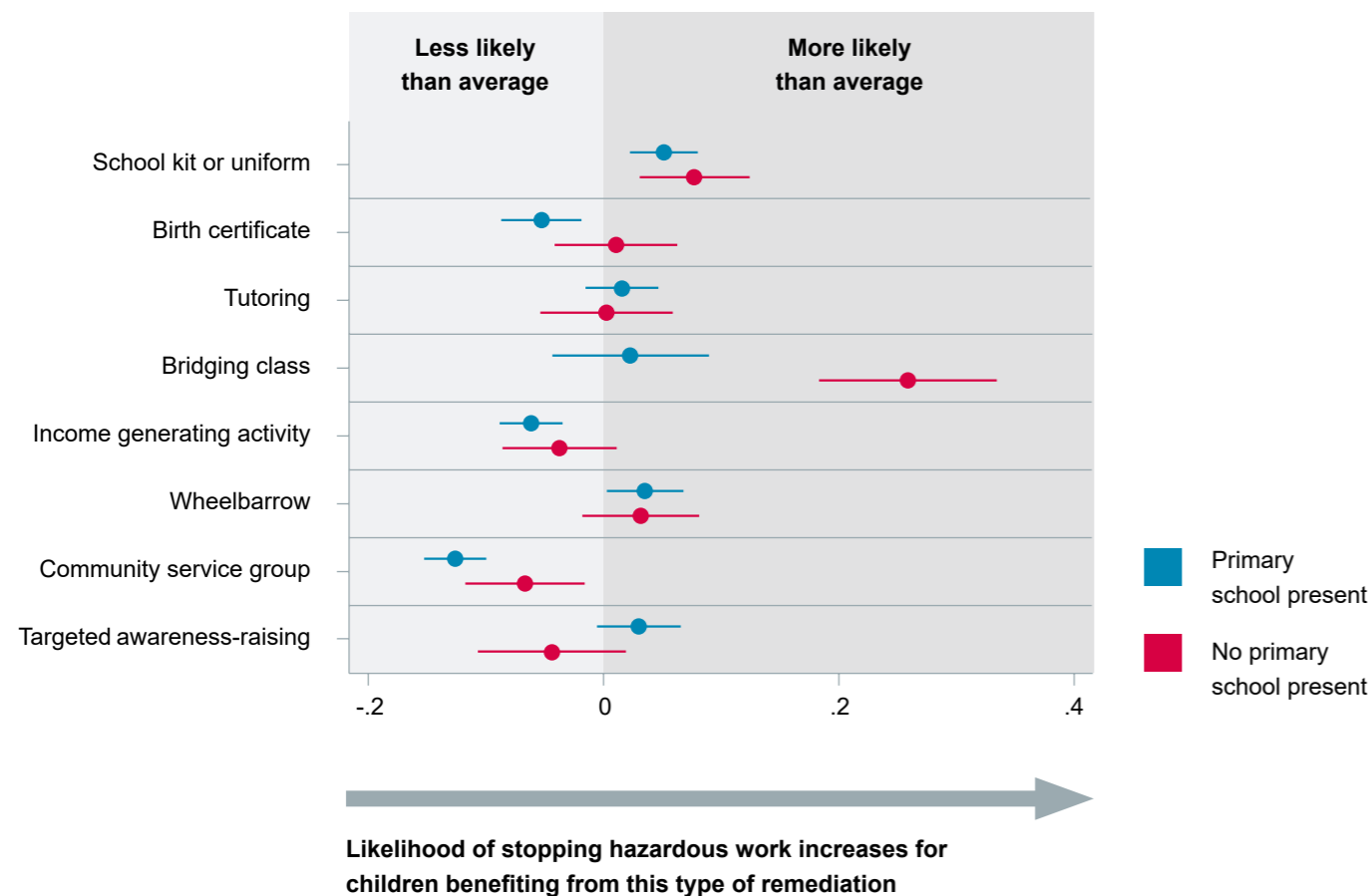


Notes: Marginal effects from a logit regression where the dependent variable is whether or not a child has stopped doing hazardous work, and the main explanatory variables are indicators for having received different types of remediation (see also figure 12). All regressions also control for the child's sex and age, school enrolment at time of first visit, total number of children in household, whether the child has older siblings, whether the child is living with biological parents, whether the head of household and spouse are literate, age of the head of household (simple and squared), electricity access and primary school presence in the community. Dots indicate coefficient estimates, horizontal bars indicate 95% confidence intervals for these estimates.

Data source: ICI-implemented CLMRS in Côte d'Ivoire.

These results must be read as descriptive. They indicate which types of remediation are associated with higher rates of “success”, which is a combination of how effective a type of remediation is and of how difficult it is to address the child labour situation.

Figure 14: By how much does the likelihood of stopping hazardous work increase for beneficiaries living in communities with or without primary school of different remediation types?



Notes: Marginal effects from a logit regression where the dependent variable is whether or not a child has stopped doing hazardous work, and the main explanatory variables are indicators for having received different types of remediation (see also figure 12). All regressions also control for the child’s sex and age, school enrolment at time of first visit, total number of children in household, whether the child has older siblings, whether the child is living with biological parents, whether the head of household and spouse are literate, age of the head of household (simple and squared), electricity access in the community. Dots indicate coefficient estimates, horizontal bars indicate 95% confidence intervals for these estimates.

Data source: ICI-implemented CLMRS in Côte d'Ivoire.

48 We do not include in this comparison school-level interventions which are not relevant for communities with no primary school present, or, conversely, where a primary school present, such as school canteens, the building of new schools and improvements to school buildings.



Finally, figure 14 breaks the sample down by whether a child lives in a community with or without a primary school present.<sup>48</sup> One remarkable difference between these two contexts is that bridging classes are associated with a considerably higher likelihood that children stop hazardous work in communities with no primary school present, probably because they substitute for formal schooling in these communities. On the other hand, targeted awareness-raising is associated with a higher likelihood of stopping hazardous work in communities with a primary school, which may be because it is much easier in these communities to shift priorities towards children’s schooling and away from helping with farm work, in response to awareness-raising.

In interpreting the results above, we must take into account a few important points:

1. In our sample of remediation beneficiaries under the ICI CLMRS in Côte d'Ivoire, **some types of remediation occur in large numbers, but others are much less common.** Hence, we find strong evidence of effectiveness for some types of remediation, while for others we have insufficient data to draw conclusions. In the results presented above, we have excluded the least common remediation types, but even amongst the types presented, case numbers differ widely (larger confidence intervals, represented as horizontal bars in the graphs, indicate fewer cases).
2. The majority of children identified in hazardous child labour **received more than one type of remediation** (see Appendix E for details – in fact, 87% of the children in the sample benefited from at least two different types of remediation, while 29% even received four or more different types). To understand the effectiveness of individual remediation types, we “control for” (i.e. separate out the effect of) other remediation types in our regression model. These estimation results are obviously less precise than if we had experimental data on children having received only one specific remediation type.

3. Under ICI’s CLMRS model, the **choice of remediation type in each case is made based on the child’s, household’s or community’s profile and specific needs** (see [online appendix](#) for more details). The same factors which guide the choice of remediation type, however, also drive the inherent likelihood that the case can be resolved (e.g. children suffering multiple deprivations may be more likely to get support for birth certificates, but less likely to stop hazardous work; children living in remote communities are less likely to stop hazardous work, but more likely to benefit from school improvements; when parents sign up for literacy training, we may assume that they also have higher than average educational aspirations for their children). While the regression model above separates out effects of some of these drivers ([see list of control variables](#)), several unobserved factors may still bias the results. For conclusive evidence of the impact of the different remediation types one by one, we would have to draw on experimental research, which to our knowledge has not been conducted in the context of CLMRS projects in the cocoa sector.

These results must be read as **descriptive**. They indicate **which types of remediation are associated with higher rates of “success”**, which is a combination of **how effective** a type of remediation is as such and of **how difficult** to address the child labour situation is in which this remediation is frequently chosen (beyond the factors we can control for in the analysis).



## What we conclude and recommend

Keeping in mind the limitations mentioned above, we draw the following broad conclusions:

- **Next to awareness-raising, support for access to and improving quality of schools appears to be particularly effective:** these types of remediation are associated with a higher than average likelihood that beneficiaries stop hazardous work (whereby, on average, all types of remediation help to stop beneficiaries from hazardous work). This might reflect the fact that better schools increase returns from regular school attendance, even for children who previously combined school and work. Scaling up school-related interventions seems to be a promising way forward to address child labour.
- **Most remediation types appear to be similarly effective for girls and boys, with some exceptions:** provision of *birth certificates*, *school improvements*, *bridging classes*, *tutoring* and *awareness-raising*, where the likelihood of girl recipients stopping hazardous work increases by more than that of boys.
- **Most remediation types appear to be similarly effective for children of different age groups, except school improvements,** where the likelihood stopping hazardous work increases more amongst younger (5–12 years old) than amongst older (13–17 years old) beneficiaries.
- **Targeted awareness-raising is associated with a higher likelihood that children stop hazardous work in communities with a primary school present.** In line with what we would expect, awareness-raising about the risks posed by child labour and the importance of schooling is most effective in combination with *access* to schooling.

**More solid evidence is needed on impacts of the various remediation types**, including the exact magnitude of effects, to inform cost-benefit analyses of remediation under CLMRS, with a view to increasing the **cost-effectiveness of the systems**. Such evidence is best generated by experimental research, where selected children in child labour are given a certain type of support in a controlled environment. Cost-benefit analysis of remediation types will help increase the cost-effectiveness of the systems and help scaling up.

### IN A NUTSHELL

- We look at how different types of remediation given to child labourers are associated with the likelihood that they stop hazardous work. The results are purely descriptive because the CLMRS allocates remediation types to children based on their needs and profiles.
- Overall, the results suggest that interventions to improve access to and quality of education are a promising remediation strategy under CLMRS in Côte d'Ivoire.
- The data suggests that birth certificates, school improvements, bridging classes, tutoring and awareness-raising might be more effective for girls than for boys (in the context of ICI-implemented CLMRS in Côte d'Ivoire), while school improvements might be more effective for younger children.
- More solid evidence concerning the impacts of the various remediation types, including the exact magnitude of effects, is needed to inform cost-benefit analyses of the effectiveness of different remediation types under CLMRS.

## How do different types of school-related remediation perform in comparison, in terms of increasing school participation?

### SUMMARY

#### Data source

- Data from follow-up visits to children previously identified in hazardous child labour under ICI-implemented CLMRS in Côte d'Ivoire.

#### Methods

- Logit regression.

#### Indicators / key concepts / definitions

- Child has started participating in school: a child previously identified in child labour and out-of-school has been attending school during **two** consecutive follow-up visits.
- Types of remediation: see [Appendix A](#) for an overview and description of types of remediation provided under CLMRS in the cocoa sector.

#### Caveats

- Sequences of follow-up visits available for this review only from ICI-implemented CLMRS in Côte d'Ivoire. The validity of results for other contexts may be limited.
- An appropriate remediation type is typically chosen for each child based on the child's profile and specific needs, which in turn drive chances for the child to participate in school; this compromises the causal interpretation of the results.

## The method we use

To complement the comparative analysis of different remediation types, we now look at how different types of school-related remediation perform in terms of helping out-of-school children to participate in school. We examine the likelihood that a child labourer initially out of school will start attending school, depending on which school-related remediation the child has received. As in the previous section, we use sequences of follow-up visits under ICI-implemented CLMRS in Côte d'Ivoire.<sup>49</sup> We consider an out-of-school child to have started going to school if the child has reported attending school during two consecutive follow-up visits.

We use a [logit regression model](#) specified as follows:

- Units of observation are children previously identified in hazardous child labour and as out of school.
- The dependent variable is whether a child has started participating in school, confirmed by two consecutive follow-up visits.
- The explanatory variables of interest are indicators whether the child has received each of the school-related remediations, namely:
  - school kit or school uniform provided
  - birth certificates provided
  - participation in tutoring
  - participation in bridging class
  - school built in the community
  - improvement of school in the community
  - school in the community equipped with a school canteen

- As control variables we include:
  - the child's age and sex (unless we split the sample by sex)
  - whether the child was enrolled in school at the time they were identified in hazardous child labour
  - whether the child is living with at least one biological parent
  - whether the child has older siblings
  - the number of children living in the household
  - whether the head of household, and whether the spouse of the head of household can read and write
  - whether the household is headed by a woman
  - the age of the head of household (as a linear and a squared term to allow for a non-linear relationship)
  - whether there is a primary school in the community (unless we split the sample by primary school presence)
  - whether the community is accessible by road all year
  - whether the community is connected to the electricity grid

In order to better understand which school-related remediation type has been most effective in which situation, we split the sample of children into groups as we did in the previous section. We look separately at boys and girls; at children aged 5 to 12 years (primary school age) and 13 to 17 years; and at children living in communities where a primary school is present and in ones where no primary school is present.

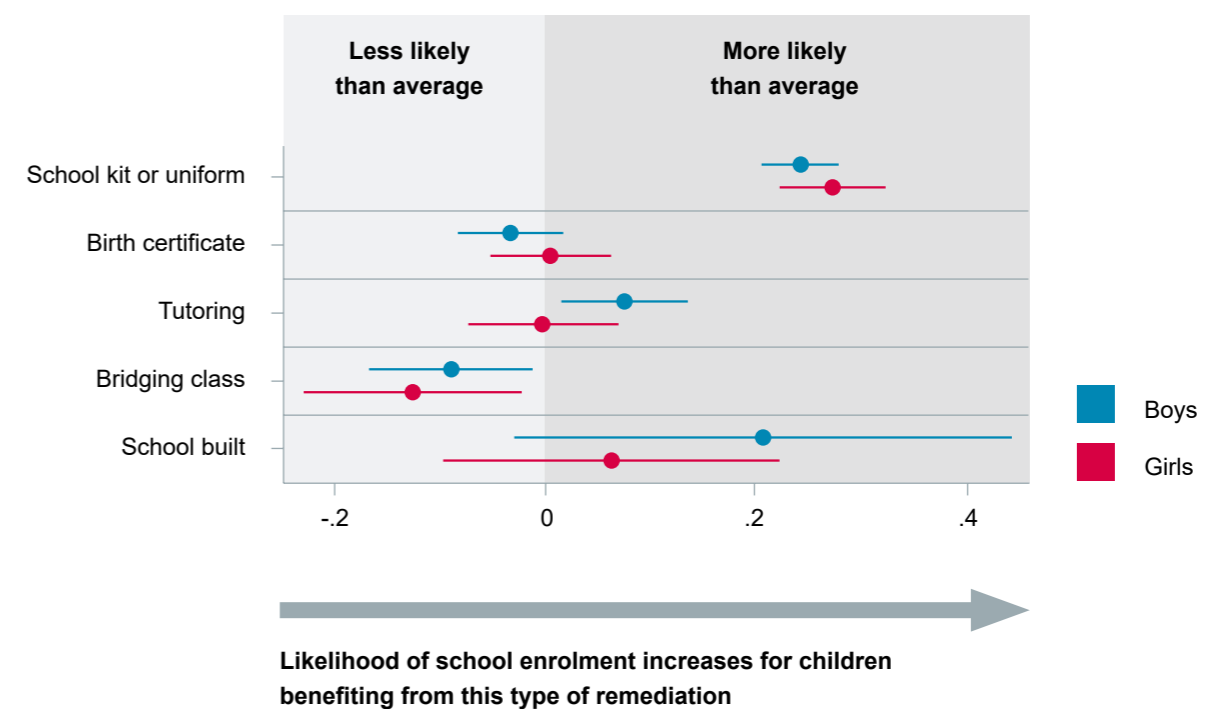
<sup>49</sup> Sequences of follow-up visits to a sufficient number of children were available for this review only from ICI implemented CLMRS in Côte d'Ivoire, which have been in place for several years and use a data management system which allows tracking of individual children.

## What we find

Figure 15 illustrates how strongly the different school-related remediation types are associated with the likelihood of **girls (red dots) and boys (blue dots)** starting to participate in school (after separating out the effects of other school-related remediations received by the same child, as well as effects of child, household and community characteristics). Dots located further to the right indicate remediation types associated with a higher likelihood that children start participating in school (the dots represent marginal effects from the logit regressions specified above; see notes below the graph for full details). Effects are only reported for intervention types with reasonably large numbers of out-of-school children in the sample (which is not the case for school improvements and school canteens).

We can see that the likelihood that children start participating in school is highest for provision of school kits and uniforms, by a similar magnitude for boys and girls. Of the interventions analysed here, the only one which appears to be slightly more effective for girls than for boys is birth certificates. For tutoring, bridging classes and building schools, the data suggests that boys might benefit more than girls, but none of these differences is statistically significant.

**Figure 15: By how much does the likelihood of starting to participate in school increase for boys or girls receiving different types of school-related remediation?**

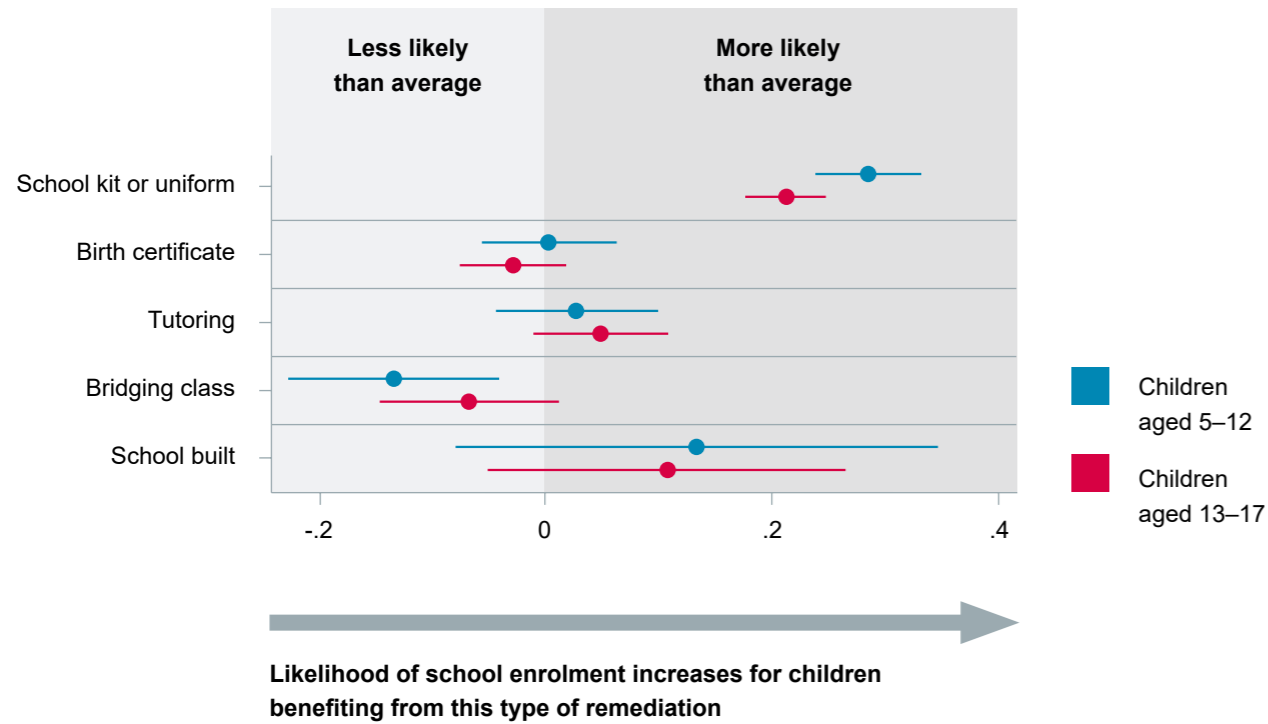


Notes: Marginal effects from a logit regression where the dependent variable is whether a child has started going to school, and the main explanatory variables are indicators for having received different types of school-related remediation. For example, receiving a school kit or uniform has a marginal effect of approximately 0.24 for boys, indicating that receiving a school kit or uniform increases the likelihood that the boy starts going to school by 24 percentage points, all other factors held equal. The value zero on the scale represents the average likelihood for a beneficiary to start going to school, which is about 14% in this sample. All regressions also control for the child's sex and age, school enrolment at time of first visit, total number of children in household, whether the child has older siblings, whether the child is living with biological parents, whether the head of household and spouse are literate, age of the head of household (simple and squared), electricity access and primary school presence in the community. Coefficient estimates displayed only for remediation types with reasonably large samples of beneficiaries (while in the actual regressions we included all types of school-related remediation). Dots indicate coefficient estimates, horizontal bars indicate 95% confidence intervals for these estimates (note that the confidence intervals tend to be larger the smaller the number of beneficiaries of a given remediation type in the sample).

Data source: ICI-implemented CLMRS in Côte d'Ivoire.

When we break the sample down by age groups (figure 16), the data suggests that school kits are slightly more effective for children of primary school age. Interestingly, the same is true for birth certificates (but the difference is not statistically significant), even though in theory birth certificates enable access to secondary schooling. A possible explanation for this is that motivation for primary school enrolment increases if children have perspectives for continuing school at a higher level.

**Figure 16: By how much does the likelihood of enrolment in school increase for beneficiaries (aged 5–12 years or 13–17 years) of different school-related remediation types?**

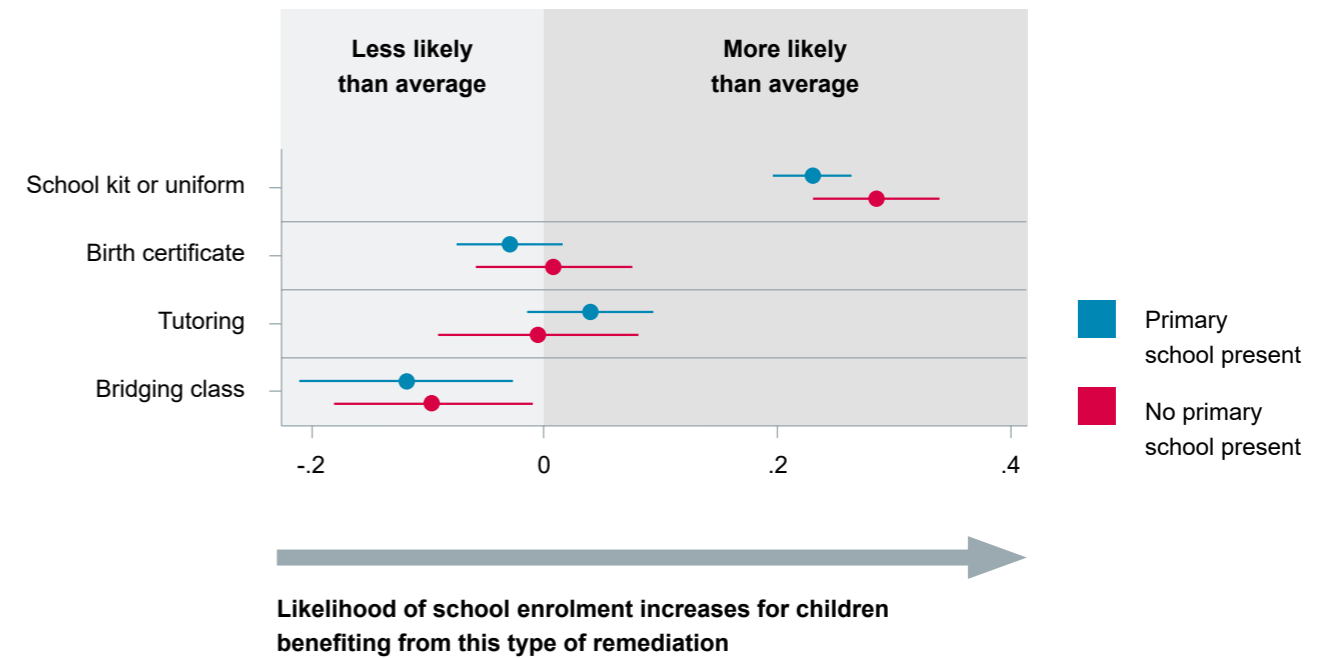


Notes: Marginal effects from a logit regression where the dependent variable is whether a child has started going to school, and the main explanatory variables are indicators for having received different types of school-related remediation. All regressions also control for the child's sex and age, school enrolment at time of first visit, total number of children in household, whether the child has older siblings, whether the child is living with biological parents, whether the head of household and spouse are literate, age of the head of household (simple and squared), electricity access and primary school presence in the community. Coefficient estimates displayed only for remediation types with reasonably large samples of beneficiaries (while in the actual regressions we included all types of school-related remediation). Dots indicate coefficient estimates, horizontal bars indicate 95% confidence intervals for these estimates.

Data source: ICI-implemented CLMRS in Côte d'Ivoire

Finally, we break the sample down by whether children are living in a community with a primary school present or with no primary school present (figure 17). The graph includes only effects for types of intervention which are provided in communities with and without primary schools present. The data suggests that birth certificates are more effective in contexts where no primary school is present within the community (but this difference is not statistically significant), while for the other types of intervention, the presence of a primary school does not strongly affect their relevance.

**Figure 17: By how much does the likelihood of starting to participate in school increase for children living in communities with or without a primary school present, who receive different types of school-related remediation?**



Notes: Marginal effects from a logit regression where the dependent variable is whether a child has started going to school, and the main explanatory variables are indicators for having received different types of school-related remediation. All regressions also control for the child's sex and age, school enrolment at time of first visit, total number of children in household, whether the child has older siblings, whether the child is living with biological parents, whether the head of household and spouse are literate, age of the head of household (simple and squared), electricity access and primary school presence in the community. Coefficient estimates displayed only for remediation types with reasonably large samples of beneficiaries (while in the actual regressions we included all types of school-related remediation). Dots indicate coefficient estimates, horizontal bars indicate 95% confidence intervals for these estimates.

Data source: ICI-implemented CLMRS in Côte d'Ivoire





## What we conclude and recommend

For reasons discussed in detail in the [previous section](#), these results are purely descriptive. They indicate which types of school-related remediation are associated with higher rates of “success” in terms of children participating in school, which is a combination of how *effective* a type of remediation is as such and of how persistent the obstacles to a child’s school participation are (beyond the factors we can control in the analysis).

Keeping this in mind, we draw the following broad conclusions:

- As a general observation, remediation planning should take into account that **different remediation types are effective in relation to different objectives**. While some remediation types may not be the most effective at stopping children from hazardous work, they may improve children’s situations by facilitating school participation and lead to better learning and development outcomes (although it goes beyond the scope of CLMRS data collection to measure a broader range of outcomes).
- **Provision of school kits or uniforms is associated with an increased likelihood that beneficiaries start participating in school**, probably because it helps to overcome some of the financial barriers to school attendance for poor households. This is also the school-related remediation type which is rolled out at largest scale.
- The data does not suggest any clear differences in effects between boys and girls, children of different age groups or communities with or without a primary school present.

More data is needed to assess how effective community or school level interventions are in terms of bringing out-of-school children to school. The data used here are limited to children in child labour and followed up under the CLMRS, while the community- and school-level interventions reach a much larger group of children, including children who are not in child labour.

These results show that **different types of remediation should be evaluated in terms of different child outcomes**.

These results show that different types of remediation should be evaluated in terms of different child outcomes.

If a remediation seems to have a relatively weak effect in terms of stopping children from hazardous work, it may nonetheless have a strong effect in terms of bringing children to school. This is the case, for example, for the building of new schools in communities. An example of the opposite effect is bridging classes, which relative to other types of remediation are highly effective in terms of stopping children from doing hazardous work, but are less effective at encouraging participation in regular schools, relative to other remediation types.

We have also analysed the effectiveness of two more specific types of interventions on specific intended outcomes, namely:

- the effect of a parent’s participation in literacy classes on children’s school enrolment
- the effect of providing a wheelbarrow to a household on children’s engagement in carrying heavy loads above the permissible weight.

In neither case could we find statistically significant effects for these intervention types on the intended outcomes in the framework of this analysis. There are several possible explanations why the data does not reveal specific effects of these specific interventions, e.g. because parents interested in literacy classes may already be more likely to send their children to school or because these types of interventions are in many cases combined with others, so that it becomes difficult to attribute effects to specific elements of support. For more solid evidence on the effectiveness of specific remediation types on specific outcomes, focused studies with experimental methods are required.

### IN A NUTSHELL

- We look at how different types of school-related remediation given to out-of-school children in child labour are associated with the likelihood that these children start participating in school. The results are purely descriptive because the CLMRS allocates remediation types to children based on their needs and profiles.
- The results suggest that the provision of school kits and school uniforms is a promising strategy for increasing school participation amongst child labourers under CLMRS in Côte d’Ivoire.
- Different types of remediation show different results depending on the outcome we look at. Remediation types which appear relatively less effective in terms of stopping children from hazardous work may be effective in terms of increasing their school participation and vice versa.
- More comprehensive data (not limited to follow-up records of child labourers) and robust methods of assessment are needed to understand the effectiveness of interventions at school level.

# Appendix A:

## Overview of CLMRS currently in place in the cocoa sector in Côte d'Ivoire and Ghana



In this section, we analyse general information about the design and set-up of 15 different Child Labour Monitoring and Remediation Systems in the cocoa sector, 10 in Côte d'Ivoire and 5 in Ghana. The analysis is based on information shared with ICI by CLMRS implementers, and information on ICI-implemented CLMRS. In some cases we refer to more than one CLMRS project, when the same implementer has CLMRS in both Ghana and Côte d'Ivoire, or along different company supply chains, with each CLMRS project being adjusted to the specific context.

### Components of CLMRS

In this section, we describe differences and similarities in system design and set-up. This section is organised around the following key components of a CLMRS, as defined in ICI's Effectiveness Review of CLMRS in the Smallholder Agricultural Sector of Sub-Saharan Africa (2017):












































- **Training and awareness-raising:** monitoring agents receive specific training in monitoring techniques, child labour and child rights, and child safeguarding. The system includes an element of awareness-raising in the communities where children are monitored.
- **Monitoring:** the system involves direct observations (involving a personal visit to home or farm), in order to identify child labourers and to determine risks to which they are exposed regularly (at a minimum frequency), as well as management of data in such a way that individual cases can be tracked over time.
- **Identification:** the system identifies children in child labour or hazardous child labour (not just "at risk"), according to an operationalised definition, typically based on ILO conventions and national legislation, and a set of methods and tools.
- **Support (remediation and prevention):** the system provides some form of remediation to children identified in (hazardous) child labour.
- **Follow-up:** the system includes procedures for regular and repeated assessment of whether a child identified continues to be in (hazardous) child labour. This process included (i) personal visits and (ii) a clear procedure to declare that a child is no longer in hazardous child labour.
- **Third-party verification:** data collected by the system is externally and independently verified/ audited to ensure that the information provided is correct and truthfully reflects the local situation.
- **Partnership:** the system is implemented in coordination with different structures and institutions involved in addressing child labour (national to local government bodies, workers' and employers' organisations, certification schemes, industry, etc) and shares information.

This overview describes the features of many CLMRS commonly implemented by civil society and private sector actors. However, at national level, the Ghana Child Labour Monitoring System (GCLMS<sup>50</sup>) matches very closely the systems covered here. The main differences at the operational level are the systematic use of referral to public services for remediation, rather than through direct intervention by the system, and the fact that follow-up is the responsibility of the public services and community actors involved in the system. In Côte d'Ivoire, the national child labour monitoring and remediation system, SOSTECI, has not only a direct operational function, but also a coordination role between systems implemented by various actors.

<sup>50</sup> Ghana Child Labour Monitoring System (GCLMS), 2010, Republic of Ghana, Ministry of Employment and Labour (MERL).

Table A1: Overview of the 15 projects reviewed in this report

Country	ICI involved (managing or supporting)?	Target # household monitoring visits per year	Who is hired as monitoring agents	Awareness-raising conducted with	Data collection instruments developed by	Interviews held with	Support to remediate and prevent child labour implemented by	Types of support delivered
Ghana	✗	1	Hired enumerators	👤 Farmers	ICI	👤 Household head/farmer	-	-
Ghana	✗	2	Paid community members Other unpaid agents	👤 Farmers 🏢 Local authorities 📄 Cooperative/ producer organisation 🏠 Community	Government	👤 Household head/farmer 👤 Child 🎓 School	Local partner organisation Community-based structure Referral to government services	<ul style="list-style-type: none"> <li>● Individual capacity strengthening</li> <li>● Information</li> <li>● Referral to government services</li> <li>● In-kind/monetary support</li> <li>● Infrastructure construction/rehabilitation</li> <li>● Provision of non-financial/financial services</li> </ul>
Ghana	✓	1	Paid community members	👤 Farmers 📄 Cooperative/ producer organisation 🏠 Community	ICI	👤 Household head/farmer 👤 Child	ICI	<ul style="list-style-type: none"> <li>● Individual capacity strengthening</li> <li>● Information</li> <li>● Referral to government services</li> <li>● In-kind/monetary support</li> <li>● Provision of non-financial/financial services</li> </ul>
Ghana	✓	1	Paid community members	👤 Farmers 📄 Cooperative/ producer organisation 🏠 Community	ICI	👤 Household head/farmer 👤 Child	ICI	<ul style="list-style-type: none"> <li>● Individual capacity strengthening</li> <li>● Information</li> <li>● Referral to government services</li> <li>● In-kind/monetary support</li> <li>● Provision of non-financial/financial services</li> </ul>
Ghana	✗	?	Unpaid community members	🏠 Community	Government	👤 Household head/farmer 👤 Child	Government services	<ul style="list-style-type: none"> <li>● Referral to government services</li> <li>● Information</li> </ul>

Country	ICI involved (managing or supporting)?	Target # household monitoring visits per year	Who is hired as monitoring agents	Awareness-raising conducted with	Data collection instruments developed by	Interviews held with	Support to remediate and prevent child labour implemented by	Types of support delivered
Côte d'Ivoire	✓	1	Paid cooperative members	 Farmers  Cooperative/ producer organisation	Project ICI	 Household head/farmer  Child	ICI	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> In-kind/monetary support</li> <li><span style="color: grey;">●</span> Provision of non-financial/financial services</li> <li><span style="color: green;">●</span> Individual capacity strengthening</li> <li><span style="color: blue;">●</span> Referral to government services</li> </ul>
Côte d'Ivoire	✗	3	Paid community members Paid cooperative members	 Farmers  Cooperative/ producer organisation	Project	 Household head/farmer  Child  Non-family farm labourers	Structure set up by the project Cooperative/producer organisation Community-based structure, referral to government services	<ul style="list-style-type: none"> <li><span style="color: orange;">●</span> Information</li> <li><span style="color: blue;">●</span> Community capacity strengthening</li> <li><span style="color: red;">●</span> In-kind/monetary support</li> <li><span style="color: yellow;">●</span> Infrastructure construction/rehabilitation</li> <li><span style="color: blue;">●</span> Referral to government services</li> </ul>
Côte d'Ivoire	✓	2	Paid cooperative members	 Farmers  Cooperative/ producer organisation  Community	Project ICI	 Household head/farmer  Other household members	Structure set up by the project Local partner organisation Cooperative/producer organisation Community-based structure	<ul style="list-style-type: none"> <li><span style="color: grey;">●</span> Provision of non-financial/financial services</li> <li><span style="color: yellow;">●</span> Infrastructure construction/rehabilitation</li> <li><span style="color: blue;">●</span> Referral to government services</li> <li><span style="color: green;">●</span> Individual capacity strengthening</li> <li><span style="color: blue;">●</span> Community capacity strengthening</li> <li><span style="color: red;">●</span> In-kind/monetary support</li> </ul>
Côte d'Ivoire	✗	1	Paid cooperative members	 Farmers	Project	 Household head/farmer  Child  Other household members  Non-family farm labourers	Cooperative/producer organisation Private company Referral to government services	<ul style="list-style-type: none"> <li><span style="color: blue;">●</span> Referral to government services</li> <li><span style="color: red;">●</span> In-kind/monetary support</li> <li><span style="color: yellow;">●</span> Infrastructure construction/rehabilitation</li> <li><span style="color: grey;">●</span> Provision of non-financial/financial services</li> <li><span style="color: blue;">●</span> Community capacity strengthening</li> </ul>
Côte d'Ivoire	✓	1	Paid community members	 Farmers  Cooperative/ producer organisation  Community	ICI	 Household head/farmer  Child	ICI Other international organisation	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> In-kind/monetary support</li> <li><span style="color: grey;">●</span> Provision of non-financial/financial services</li> <li><span style="color: blue;">●</span> Referral to government services</li> <li><span style="color: orange;">●</span> Information</li> <li><span style="color: blue;">●</span> Community capacity strengthening</li> </ul>
Côte d'Ivoire	✓	1	Paid community members	 Farmers  Community	ICI	 Household head/farmer  Child	ICI	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> In-kind/monetary support</li> <li><span style="color: grey;">●</span> Provision of non-financial/financial services</li> <li><span style="color: blue;">●</span> Referral to government services</li> <li><span style="color: orange;">●</span> Information</li> <li><span style="color: blue;">●</span> Community capacity strengthening</li> </ul>
Côte d'Ivoire	✓	1	Paid community members	 Farmers  Community	ICI	 Household head/farmer  Child	ICI	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> In-kind/monetary support</li> <li><span style="color: grey;">●</span> Provision of non-financial/financial services</li> <li><span style="color: blue;">●</span> Referral to government services</li> <li><span style="color: orange;">●</span> Information</li> <li><span style="color: blue;">●</span> Community capacity strengthening</li> </ul>
Côte d'Ivoire	✓	1	Paid community members	 Farmers  Cooperative/ producer organisation  Community	ICI	 Household head/farmer  Child	ICI	<ul style="list-style-type: none"> <li><span style="color: red;">●</span> In-kind/monetary support</li> <li><span style="color: blue;">●</span> Referral to government services</li> <li><span style="color: orange;">●</span> Information</li> <li><span style="color: blue;">●</span> Community capacity strengthening</li> </ul>
Côte d'Ivoire	✓	1	Paid community members Hired enumerators	 Farmers  Cooperative/ producer organisation  Community	ICI	 Household head/farmer  Child	ICI	<ul style="list-style-type: none"> <li><span style="color: orange;">●</span> Information</li> </ul>
Côte d'Ivoire	✗	Regular basis	Unpaid community members	 Community	Government	 Parents	Government services	<ul style="list-style-type: none"> <li><span style="color: blue;">●</span> Referral to government services</li> <li><span style="color: orange;">●</span> Information</li> </ul>

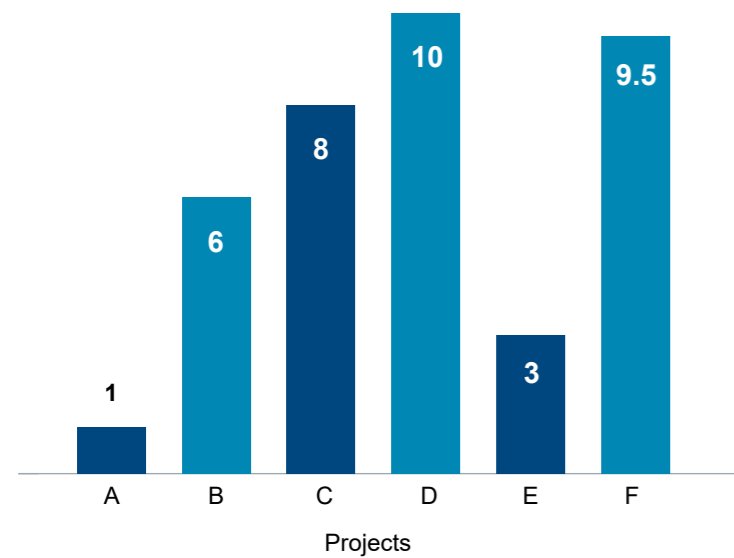
## Training and awareness-raising

### Training of monitoring agents

Training includes a mixture of topics: child rights, child labour and safeguarding, interview and awareness-raising techniques, use of digital monitoring tools, and the structure and functioning of the supply chain.

Among the CLMRS reviewed for which information on training duration was available, the **minimum number of training days** each agent should receive, according to the CLMRS protocol, **ranges from 1 to 10**. Figure A2 gives an overview of the variations of the amount of training given to agents among some of the projects:

**Figure A2: Minimum number of training days required for a monitoring agent for different systems.**



Note: Letter labels are arbitrarily assigned to the CLMRS projects, with new letters assigned in each table.

Mandatory refresher training also varies greatly from none to annual sessions, the most common response.

## Awareness-raising

Awareness-raising about child labour and the resulting harm, as well as other related topics may be addressed to farmers, local authorities, cooperatives / producer organisations or communities. The following table displays the **number of farmers reportedly reached by individual or collective awareness-raising sessions since the project start**, according to the information shared by the different CLMRS implementers.

**Table 2: Number of farming households reached by individual or collective awareness-raising sessions since project start among the CLMRS projects under review.**

Project	A	B	C	D	E	F	G	H	I	J	K	L
Households	120'000	2'546	23'543	14'2875	11'520	75'625	2'370	3'642	4'857	830	1'099	168

## Monitoring

In the context of a CLMRS, **monitoring** consists of direct observations in the field (personal visits to homes and/or farms), identification of children in child labour (or at risk), and management of data collected in such a way that individual cases can be tracked over time.

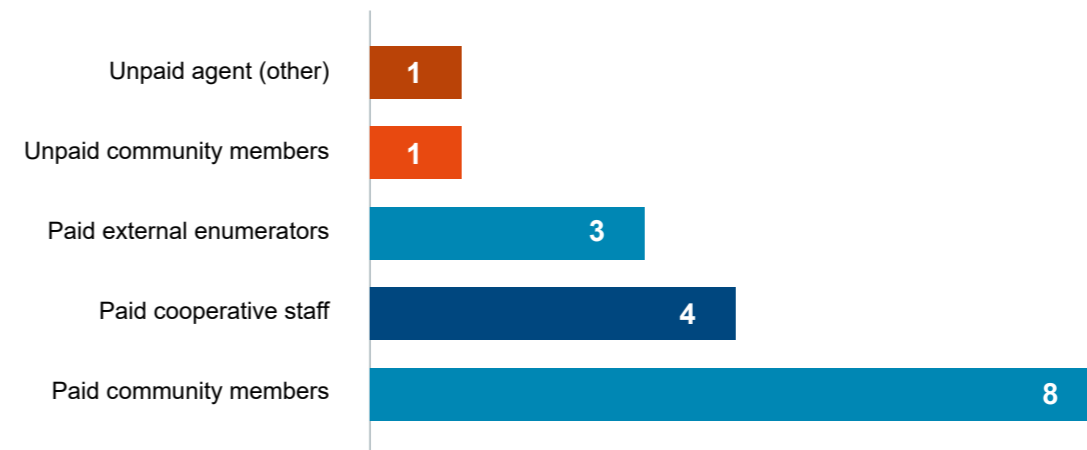
### Monitoring agents

The profile of monitoring agents may influence the amount of training they need to carry out data collection activities in the field.

Agents can be local cocoa producers or members a cooperative, who work part-time as monitors (from the community, known by the farmers); full-time external agents hired by cooperatives or trading companies with roles exceeding CLMRS (certification, farmer agricultural training) and covering several communities (from outside the community, but known by the farmers); external enumerators hired specifically for CLMRS data collection (from outside the community, unknown to the farmers); or community members who do the monitoring on a voluntary basis. Figure A3 provides an overview of the types of monitoring agents used by the 15 CLMRS projects reviewed.

## The large majority of agents are paid rather than unpaid.

**Figure A3: Status of enumerators (NB: several projects rely upon different types of enumerators).**



### Means of transport available to data collection agents

The total coverage of the different CLMRS reviewed varies from 4,700 to 75,000 households, which represents between 6 and 46 households per agent. The intended frequency of the household visits varies from every 2 years to 3 times a year.

Given the variations in the expected frequency of the visits and number of households to be covered by agent per year, the means of transportation available to the agents is clearly an important factor affecting an agent's capacity to reach the households they monitor, especially in rural contexts where many villages are isolated and not accessible by paved roads.

**Bicycles were the most common means of transportation** for monitoring agents and were provided as part of the CLMRS in 10 projects.



**Data collection tools**

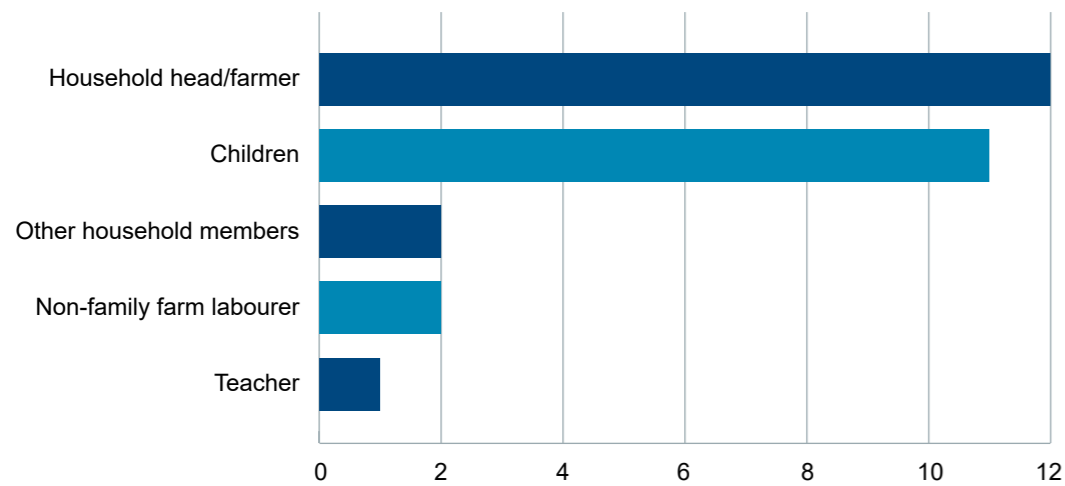
The large majority of CLMRS rely on mobile data collection, using a mixture of applications developed internally or by a third party. Two CLMRS make partial or exclusive use of paper-based questionnaires.

The questionnaires used to identify children in child labour vary among the projects. One project uses a questionnaire developed under the government child labour monitoring system, and the other projects use questionnaires developed in-house or by a third party specifically for the CLMRS.

**Who provides information on child labour as part of the system?**

In all projects reviewed, monitoring agents collect data from farmers or heads of the farming households. In most projects, at least one module of the questionnaires is addressed directly to children (11 projects). Only a few projects collect data from other household members, non-family farm workers or teachers (figure A4).

**Figure A4: Who responds to questionnaires as part of the Child Labour Monitoring and Remediation System?**



Note: Vertical axis displays the number of times a given type of informant is solicited throughout the CLMRS projects' data collection processes.

**Identification of children in child labour, hazardous child labour or at risk**

The identification process relies on having an operational definition of a child in child labour, in hazardous child labour, or at risk. The definitions used vary among projects, whereby all CLMRS rely on the relevant ILO Conventions and the national legislative frameworks for hazardous activities. For the category of children "at risk" of child labour, no common definition exists, and various CLMRS implementers have set up their own operational definitions. Examples of criteria for children to be considered "at risk" include: children identified in light work, without a birth certificate, out of school, with siblings or friends involved in hazardous child labour, with poor academic performance, poor school attendance, out of school and orphaned.

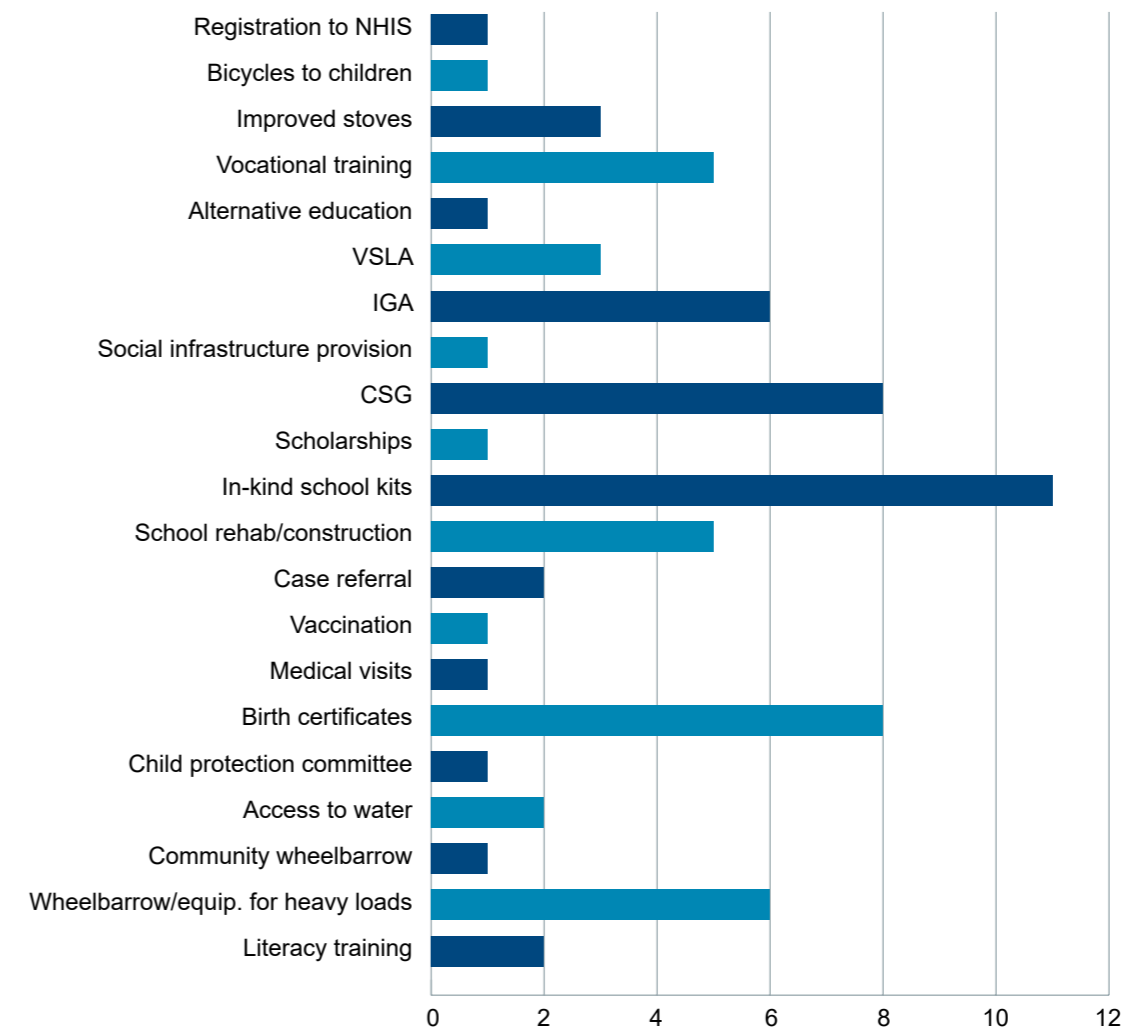
**Response: withdrawal, referral and remediation**

Projects offer a wide range of child labour remediation to children, households and communities, covering different intervention areas: some are intended to facilitate children's access to quality education (such as provision of scholarships, school kits, birth certificates or bicycles to children) or to improve education infrastructure in the community; some aim to improve household income (such as income generating activity support, VSLAs, literacy training for adults); some are intended to provide alternatives to children's engagement in hazardous tasks (such as mobilising community service groups, providing wheelbarrows, providing access to drinking water sources); and some relate to child protection or child rights more broadly (such as registration for Ghana's National Health Insurance System (NHIS), vaccinations, setting up child protection committees).

Figure A5 provides an overview of the types of remediation and of how many of the reviewed CLMRS provide each type of remediation.

These interventions may be carried out by structures set up by the project, by local partners (NGOs, ICI, other civil society actors), by cooperatives / producer organisations, by community-based services supported by the project or by private company field staff. Alternatively, aiming to achieve increased sustainability of the remediation component of a CLMRS and to directly involve and strengthen government agencies, a few CLMRS projects refer identified cases of child labour to government services for remediation.

**Figure A5: Different remediation types provided under CLMRS – the bars indicate how many of the CLMRS reviewed provide each type.**



## Follow-up of children identified in child labour

CLMRS include procedures to assess whether a child identified is still in (hazardous) child labour, namely: (i) personal visits and (ii) a clear procedure for declaring that a child is no longer in (hazardous) child labour.

The criteria used to declare that a child has stopped working or doing hazardous tasks differ across systems, but they mostly converge on the idea that the criteria should involve a certain time lag after the identification of the case and a certain number of follow-up visits. Examples of criteria include:

- Two follow-up visits over 9 months.
- Child follow-up at home and school + farm visit after 6 months of remediation.
- Mix of weekly and monthly visits over 6 months.
- Follow-up visits 3–6 months after remediation.

## Third-party verification

CLMRS projects sometimes resort to external and independent entities to verify/audit their (anonymised) data, in order to make sure that information provided is correct and truthfully reflects the local situation. Four projects in the review resort to a third-party verification of their data on a regular basis. Among these, two projects made audit reports publicly available through the verifying entity.

## Partnership

CLMRS also differ by the degree of cooperation embedded at several levels of the system. In some cases, one entity provides the IT infrastructure, manages data collection, data storage and data analysis for CLMRS projects in different supply chains; in other cases, various partners, including government offices, are involved at different levels of the CLMRS. Table A2 provides an overview of the number of companies involved in different kinds of collaboration:

**Table A2: Number of projects involved in different kinds of collaboration for the implementation of CLMRS.**

Types of cooperation	Community	External IT providers	Local authorities involved in monitoring and remediation	International research institute involved in evaluation	NGOs or Foundations involved in remediation	Third-party data verification
Number of instances	9	2	2	1	2	4

All projects included in this review are partially or totally **funded by private sector resources**, with one model also relying on resources mobilised from communities, while other projects are funded by international development assistance and private foundations.



## Conclusions

The information provided by implementers of the different projects reviewed demonstrates a great diversity of set-ups and approaches to putting in place a Child Labour Monitoring and Remediation System. Beyond certain commonalities and the shared focus on tackling child labour, even within the limited scope of the cocoa sector in West Africa, approaches differ considerably.

The diversity of approaches CLMRS makes it challenging to compare these different systems; there is therefore no one-size-fits-all way to assess them and to report on their effectiveness.

Nonetheless, if we compare the information provided by CLMRS implementers in this effectiveness review with the results of the first phase, published in 2017, considerable progress has been made. In addition to the notable improvements in the coverage of CLMRS, there appears to be increasing alignment in terms of approaches taken on some aspects of system set-up and implementation, as well as calls from many CLMRS implementers for further standardisation of definitions and benchmarks.<sup>51</sup>

The diversity of approaches CLMRS makes it challenging to compare these different systems; there is therefore no one-size-fits-all way to assess them and to report on their effectiveness.

51 ICI (2021) [Benchmarking Study: Overview and Definition of Child Labour Monitoring and Remediation Systems](#).

Table A3: Overview of the 15 CLMRS projects reviewed, by component

Core components of CLMRS	Instances observed in this review	Main trends
<b>Training and awareness-raising</b>	<ul style="list-style-type: none"> <li>• <b>Training of monitors</b> encompasses <b>initial training</b> and <b>mandatory refresher training</b>, on topics such as child's rights, child labour and safeguarding, interview and awareness-raising techniques, use of IT monitoring tools, and the structure and functioning of the supply chain.</li> <li>• <b>Awareness-raising</b> takes place at different <b>levels</b> of intervention, like farmers, local authorities, cooperatives / producer organisations or communities.</li> </ul>	<ul style="list-style-type: none"> <li>• Initial training for monitors lasts between 1 and 10 days; most of projects provide monitors with at least 5 days of training before they begin work.</li> <li>• Refresher training for monitors takes place at varying frequencies, ranging from never to monthly; most projects provide annual refresher training to monitors.</li> <li>• All projects involve some type of awareness-raising targeted directly to farming households.</li> <li>• Most, but not all, projects also organise awareness-raising sessions at community or cooperative level.</li> </ul>
<b>Monitoring</b>	<ul style="list-style-type: none"> <li>• <b>Agents</b> are in charge of monitoring different <b>numbers of households</b>.</li> <li>• And are provided diverse <b>means of transportation</b> (motor bikes, bicycles, cars paid by the project vs. no support).</li> <li>• <b>Data collection</b> is based either on paper or digital questionnaires.</li> <li>• <b>Questionnaires</b> used include those developed by governments, in-house or by a third party.</li> <li>• <b>Respondents to questionnaires</b> may be heads of household, children, other members of the household, non-family farm labourers or teachers.</li> </ul>	<ul style="list-style-type: none"> <li>• The number of households covered by a single monitor varies considerably across the projects, as does the targeted number of visits each household should receive per year (from 3 times a year to once every 2 years).</li> <li>• Bicycles are the most common means of transport provided to monitors. Three projects provided either a transport allowance or no means of transport.</li> <li>• Over 90% CLMRS projects rely on mobile data collection tools.</li> <li>• Most CLMRS projects use questionnaires developed by the project or by a third party: 75% are aligned with ICI's questionnaires.</li> <li>• Interviews are primarily held with household heads and children: 85% of CLMRS interview children.</li> </ul>
<b>Identification</b>	<ul style="list-style-type: none"> <li>• The identification process relies on <b>operational definitions</b> to identify a <b>child in (hazardous) child labour and/or a child at risk</b> of child labour.</li> <li>• Definitions were based on ILO or national Hazardous Activity Frameworks, or were self-defined.</li> </ul>	<ul style="list-style-type: none"> <li>• All projects used definitions of <i>child labour</i> and <i>hazardous child labour</i> aligned with national legislation.</li> <li>• Definitions of a child "at risk" vary considerably between projects.<sup>52</sup></li> </ul>
<b>Support (prevention and prevention)</b>	<ul style="list-style-type: none"> <li>• Support delivered under the CLMRS includes measures to <b>remediate</b> current cases, <b>mitigate</b> risks and <b>prevent</b> future child labour; intended beneficiaries include children <i>in child labour</i> and children <i>not in child labour</i>.</li> <li>• Support can be <b>targeted at the child, household or community</b>.</li> <li>• Over 20 different types of support to prevent or remediate child labour were reported across the CLMRS projects.</li> <li>• Support may be <b>delivered by different stakeholders</b>.</li> </ul>	<ul style="list-style-type: none"> <li>• Partners in the delivery of support to prevent and remediate child labour include: the project implementer, local partners, cooperatives or producer organisations, community-based services supported by the project, private company field staff or government services.</li> </ul>
<b>Follow-up</b>	<ul style="list-style-type: none"> <li>• May include a two-step procedure to assess whether a child identified is still in (hazardous) child labour: (i) personal visits, (ii) a clear procedure to declare that the child is no longer in (hazardous) child labour.</li> <li>• Different criteria are used to declare that a child has stopped child labour.</li> </ul>	<ul style="list-style-type: none"> <li>• A sequence of follow-up visits is required for a child to be considered as "followed-up".</li> <li>• CLMRS projects converge on the idea that a minimum defined time lag is required after the identification of a child labour case before a child should be followed-up, ranging from 3 to 9 months, 6 months being the most common.</li> </ul>
<b>Third-party verification</b>	<ul style="list-style-type: none"> <li>• CLMRS may use external and independent entities to conduct audits and/or verify data collected.</li> </ul>	<ul style="list-style-type: none"> <li>• 4 out of 13 CLMRS projects report third-party verification of their data on a regular basis.</li> </ul>
<b>Partnership</b>	<ul style="list-style-type: none"> <li>• CLMRS differ by the degree of cooperation embedded at several levels of the system, from single-company to multi-level/multi-stakeholder cooperative projects.</li> </ul>	<ul style="list-style-type: none"> <li>• CLMRS projects involving local authorities in monitoring and remediation: 2</li> <li>• CLMRS projects involving international research institute in evaluation: 2</li> <li>• CLMRS projects involving NGOs or foundations in remediation: 2</li> <li>• CLMRS projects soliciting third-party verification: 4</li> </ul>

<sup>52</sup> ICI and other stakeholders have started developing data-based models for classifying children according to their child labour risk, using readily available child labour household data to train the models and farmer registers with basic demographic information. For an introduction to these approaches, see ICI (2021): Risk Models to Predict (Hazardous) Child Labour.

## Glossary

### Median:

The median of a variable in a sample is the “middle” value, with 50% of the observations having a higher and 50% of the observations having a lower value.

### Regression:

Regression is a statistical method which is used to determine the direction and strength of the relationship between one dependent variable and several explanatory variables. The general form of a multiple linear regression is:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + \dots + b_tX_t + u$$

Where:

- Y is the dependent variable the model tries to explain
- X1, X2, X3, ... are the variables used to explain Y (explanatory or independent variables)
- a is the intercept
- b1, b2, b3, ... are the slope parameters
- u is the regression residual

A regression model can include variables measured on different scales (nominal, ordinal, interval, ratio scale).

The values of slope parameters and the intercept are then estimated using a data set which contains values of the dependent and the explanatory variables for a sample of observations. A statistical method is applied to identify the values of the intercept and slope parameters which are the best “fit” for the model, i.e. which minimise the residuals.

### Logistic regression:

Logistic regression models are used when the dependent variable in a multi-variate analysis is binary (i.e. can take only the values 0 or 1). Logistic regression is useful to analyse the probability of a certain event (e.g. the probability that a child stops doing hazardous work after receiving support) based on one or several explanatory variables. In a logistic regression, the equation which models the relationship between the dependent and the explanatory variables is a non-linear equation, which accounts for the fact that the value on one side of the equation can only be either zero or one. The explanatory variables in a logistic regression model can be measured on any scale, and the explanatory variables included in the model can be measured on different scales.

### Multicollinearity:

In regression analysis, multicollinearity occurs when the dataset contains a high correlation between one explanatory variable and another. Since regression analysis is based on the idea that the value of one independent variable can be changed while holding the value of all other independent variables fixed, it becomes difficult to estimate independently the relationship between each explanatory variable and the dependent variable when changes in one explanatory variable are associated with changes in another. Strong correlations between explanatory variables can therefore cause problems when fitting the regression model and interpreting the results.

## Acronyms

<b>CLMRS</b>	Child Labour Monitoring and Remediation System
<b>GCLMS</b>	Ghana Child Labour Monitoring System
<b>ICI</b>	International Cocoa Initiative
<b>ILO</b>	International Labour Organization
<b>SOSTECI</b>	Système d’Observation et de Suivi du Travail des Enfants en Côte d’Ivoire
<b>WCF</b>	World Cocoa Foundation

## Bibliography

ILO (2005). Guidelines for Developing Child Labour Monitoring Processes. ILO, Geneva.  
URL: <https://www.ilo.org/ipec/Action/Childlabourmonitoring/lang-en/index.htm>

ICI (2020). ICI Strategy 2021–26. ICI, Geneva.  
URL: [https://cocoainitiative.org/wp-content/uploads/2020/09/ICI-2021-2026-Strategy\\_EN.pdf](https://cocoainitiative.org/wp-content/uploads/2020/09/ICI-2021-2026-Strategy_EN.pdf)

World Cocoa Foundation (2020). WCF Strategy: Pathway to Sustainable Cocoa. WCF, Washington, DC.  
URL: <https://www.worldcocoafoundation.org/wp-content/uploads/2020/02/Pathway-2020.pdf>

United Nations Office of the High Commissioner for Human Rights (2011). Guiding Principles on Business and Human Rights. United Nations, New York and Geneva.  
URL: [https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr\\_en.pdf](https://www.ohchr.org/documents/publications/guidingprinciplesbusinesshr_en.pdf)

ICI (2021). Benchmarking Study: Overview and Definition of Child Labour Monitoring and Remediation Systems. ICI, Geneva.  
URL: [https://cocoainitiative.org/wp-content/uploads/2021/04/ICI\\_CLMRS\\_Benchmarking-study.pdf](https://cocoainitiative.org/wp-content/uploads/2021/04/ICI_CLMRS_Benchmarking-study.pdf)

ICI (2017). Effectiveness Review of Child Labour Monitoring Systems in the Smallholder Agricultural Sector of Sub-Saharan Africa. Review of Emerging Good Practices. ICI, Geneva.  
URL: [https://cocoainitiative.org/wp-content/uploads/2017/05/ICI-CLMS-Effectiveness\\_15\\_May.pdf](https://cocoainitiative.org/wp-content/uploads/2017/05/ICI-CLMS-Effectiveness_15_May.pdf)

OECD (2011). OECD Guidelines for Multinational Enterprises. OECD Publishing.  
URL: <https://dx.doi.org/10.1787/9789264115415-en>

ICI (2019). Human Rights Due Diligence in Supply Chains: A Review of Legislation and Guidelines through the Lens of the UN Guiding Principles. ICI, Geneva.  
URL: [https://cocoainitiative.org/wp-content/uploads/2019/10/HRDD\\_report\\_ICI\\_Final\\_w\\_image.pdf](https://cocoainitiative.org/wp-content/uploads/2019/10/HRDD_report_ICI_Final_w_image.pdf)

ICI (forthcoming 2021). Risk Models to Predict (Hazardous) Child Labour. ICI, Geneva.

Nestlé Cocoa Plan (2019). Tackling Child Labour. 2019 Report.  
URL: <https://www.nestle.com/sites/default/files/2019-12/nestle-tackling-child-labor-report-2019-en.pdf>

Rainforest Alliance (2020). Assess-and-Address Position Paper. The Assess-and-Address Model in the Rainforest Alliance Sustainable Agriculture Standard. Rainforest Alliance, Amsterdam and New York.  
URL: <https://www.rainforest-alliance.org/business/wp-content/uploads/2019/06/Assess-and-address.pdf>

Rainforest Alliance (2020). Sustainable Agriculture Standard Farm Requirements. Rainforest Alliance, Amsterdam and New York.  
URL: [https://www.rainforest-alliance.org/business/wp-content/uploads/2020/06/2020-Sustainable-Agriculture-Standard\\_Farm-Requirements\\_Rainforest-Alliance.pdf](https://www.rainforest-alliance.org/business/wp-content/uploads/2020/06/2020-Sustainable-Agriculture-Standard_Farm-Requirements_Rainforest-Alliance.pdf)

Rainforest Alliance (2021). Policy for Farm and Chain of Custody Certification in Cocoa. Rainforest Alliance, Amsterdam and New York.  
URL: [https://www.rainforest-alliance.org/business/wp-content/uploads/2020/04/Rainforest-Alliance\\_Policy-for-Farm-and-Chain-of-Custody-Certification-in-Cocoa.pdf](https://www.rainforest-alliance.org/business/wp-content/uploads/2020/04/Rainforest-Alliance_Policy-for-Farm-and-Chain-of-Custody-Certification-in-Cocoa.pdf)

PMI (2020). Agricultural Labor Practices Progress Update. Empowering Women for Change. PMI, Lausanne and New York.  
URL: [https://www.pmi.com/resources/docs/default-source/sustainability-reports-and-publications/alp-progress-update-1-2020.pdf?sfvrsn=313b2cb4\\_2](https://www.pmi.com/resources/docs/default-source/sustainability-reports-and-publications/alp-progress-update-1-2020.pdf?sfvrsn=313b2cb4_2)

NORC (2020). Assessing Progress in Reducing Child Labor in Cocoa Production in Cocoa Growing Areas of Côte d’Ivoire and Ghana. Final Report. NORC, Chicago.  
URL: [https://www.norc.org/PDFs/Cocoa%20Report/NORC%202020%20Cocoa%20Report\\_English.pdf](https://www.norc.org/PDFs/Cocoa%20Report/NORC%202020%20Cocoa%20Report_English.pdf)

Tulane University (2015). Final Report: 2013/14 Survey Research on Child Labor in West African Cocoa Growing Areas. Tulane, University, Payson Center for International Development, New Orleans.  
URL: [https://www.dol.gov/sites/dolgov/files/ILAB/research\\_file\\_attachment/Tulane%20University%20-%20Survey%20Research%20Cocoa%20Sector%20-%2030%20July%202015.pdf](https://www.dol.gov/sites/dolgov/files/ILAB/research_file_attachment/Tulane%20University%20-%20Survey%20Research%20Cocoa%20Sector%20-%2030%20July%202015.pdf)

Ghana Child Labour Monitoring System (GCLMS), 2010, Republic of Ghana, Ministry of Employment and Labour (MERL).  
URL: [https://cocoainitiative.org/wp-content/uploads/2016/06/ghana\\_child\\_labour\\_monitoring\\_system.pdf](https://cocoainitiative.org/wp-content/uploads/2016/06/ghana_child_labour_monitoring_system.pdf)



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