ENVOY
Partnership

Community Engagement for Sustainable Elimination of Child Labor (CESEC) Programme

Social Return on Investment analysis

NOVEMBER 2022

Introduction

Envoy Partnership conducted a Social Return on Investment (SROI) evaluation of Barry Callebaut's *Community Engagement for Sustainable Elimination of Child Labor* (CESEC) Programme. The SROI was conducted in accordance with the Guide to SROI,[1] and the Social Value principles – which are managed by Social Value International.[2] Envoy Partnership were supported by Solidaridad Network, who conducted all of the fieldwork, and contributed to the design of the research materials and analysis of the results. The purpose of this study was to explore the effectiveness of the CESEC programme, the value that it creates for stakeholders, and the extent to which it represents value for money.

About Barry Callebaut

Barry Callebaut is a Belgian-Swiss cocoa processor and chocolate manufacturer, with an average annual production of 2.2 million tonnes of cocoa & chocolate. It was created in 1996 through the merging of the Belgian chocolate producer Callebaut and the French company Cacao Barry. It is currently based in Zürich, Switzerland, and operates in over 30 countries worldwide. Its customers include multinational and national branded consumer goods manufacturers and artisanal users of chocolate.

About Envoy Partnership

Envoy Partnership is a social value and impact management consultancy. We empower our clients to measure, demonstrate and enhance their social, economic and environmental impact. We guide organisations through all aspects of their social value journey, delivering high-quality independent evaluations, SROI and social value analysis, and impact management support.

Envoy Partnership also manage and chair the *Social Value in Development and Humanitarian Assistance group*, a thought-leadership group with members across the world, established in partnership with Social Value International (SVI).

About Solidaridad

Solidaridad Network is an international civil society organisation founded in 1969. Its main objective is facilitating the development of socially responsible, ecologically sound, and profitable supply chains. It operates through eight regional expertise centres in over 50 countries. Solidaridad have extensive experience in conducting primary research in rural part of Ghana, as well as on the topic of Child Labour in the Ghanaian Cocoa sector.

About the Netherlands Enterprise Agency

The Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland, RVO) have provided funding for CESEC. The agency is an executive body of the Dutch Ministry of Economic Affairs and Climate Policy (Ministerie van Economische Zaken en Klimaat, EZK). The agency helps business owners run sustainable, agricultural, innovative, or international businesses.

This report gives a summary of the evaluation methodology and findings. It was written by Oliver Kempton and Poppy Fawcett, with additional contributions from Andy Gawin Warby, Chitrangshi Biswas, and Harriet Milsted.

[1] The Guide to SROI, Social Value International

[2] Social Value Principles – Social Value International

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Child labour in Ghana

In 2021, a report from the ILO and UNICEF reported that the number of children in child labour had risen to 160 million worldwide – an increase of 8.4 million children over four years, reversing the previous downward trend in child labour. Population growth, extreme poverty, inadequate social protection measures, and the Covid-19 pandemic were all identified as drivers of increase in child labour.[3]

Additionally, a report from NORC at the University of Chicago finds that the number of children engaged in child labour in cocoa production in Cote d'Ivoire and Ghana cocoa regions grew by 13 percentage points over a 10 year period (2009-2019). This coincides with the growth of cocoa production across both countries of 62%.[4]

UNICEF estimates that of all children in Ghana aged 5-17 years, approximately 21 per cent are involved in child labour. Of this, around 14 per cent are estimated to be engaged in hazardous forms of labour.[5] In 2007/8, nearly 200,000 children were shown to be involved in hazardous work in the cocoa sector.[6]

The ILO estimates that one third of all children in child labour are excluded from school, and that child labour is likely to harm children's health. Children who attempt to combine child labour and school generally lag behind their peers and drop out prematurely.[7]

The Ghana Hazardous Activity Framework (2016) defines Child Labour in the following way:

> *"The term "child labour" is defined as work that deprives children of their childhood, their potential and their dignity. It refers to work that is mentally, physically, socially and/or morally harmful to children. It interferes with their schooling by:*
>
> - *Depriving them of the opportunity to attend school.*
> - *Obliging them to leave school prematurely; or*
> - *Requiring them to attempt to combine school attendance with excessively long and heavy work."*[8]

Not all work done by children is classified as child labour. For instance, children carrying out light, non-hazardous tasks on the family farm for a limited period of time, under supervision, and without compromising their schooling, is considered as acceptable child work. However, when activities are hazardous (such as carrying heavy loads or using sharp tools) involve working too many hours, or interferes with a child's schooling, this is considered to be 'child labour'.

[3] ILO, UNICEF, *Child Labour: Global Estimates 2020, Trends and the Road forward* (2021)

[4] Assessing Progress in Reducing Child Labor in Cocoa Production in Cocoa Growing Areas of Côte d'Ivoire and Ghana (norc.org)

[5] Prevention of Child Labour | UNICEF Ghana

[6] Ghana Tackles Child Labour in Cocoa Areas (modernghana.com)

[7] Ibid.

[8] Hazardous Child Labour Activity Framework for Ghana (HAF)

The CESEC programme

The Community Engagement for Sustainable Elimination of Child Labor (CESEC) Programme commenced in August 2020 and completed on 30th June 2022. It targeted 26 communities in 10 districts in Ghana, which were deemed to be at high risk of Child Labour.

The activities fall into four areas, as shown in Figure 1. All of the activities are focused on 26 communities judged to be at 'high risk' of child labour.

Child labour monitoring and remediation occurs through two routes:

a. **Barry Callebaut direct intervention with their supply chain** via Kachile, a Child Labour Monitoring and Remediation System (CLMRS) (activity area 1 in Figure 1). Barry Callebaut (or their partner) will reach out and intervene directly.

b. **The Child Centred Protection Committees (CCPCs)** (activity area 3 in Figure 1). The CCPCs can impact a wider range of children as they are not limited to the Barry Callebaut supply chain. They are designed to be self-sustaining, and to continue beyond the formal end of the CESEC programme.

Figure 1: Summary of all CESEC programme activities

Activity area	Summary of Primary Activities
1. Child Labour Monitoring and Remediation, within the Barry Callebaut supply chain	Child Labour Monitoring and Remediation System (CLMRS) covering 16,000 farmers, to identify and facilitate remediation of identified child labour cases, with a target of remediating around 9,000 cases.
2. Women's Empowerment	Training and setting up of Village Savings Loan Association (VSLA) to support financial empowerment.
3. Child Centred Protection System	Selection and training of the Community Child Protection Committees (CCPCs), which would identify and facilitate remediation of child labour cases in their communities, and refer to district government where appropriate.
4. Community Development & Community Action Plans (CAP)	Development of a Community Action Plan (CAP). The CAP might include activities such as construction of school buildings, or skills training for community members.

CCPC Remediation Case Study: Groin Surgery funding for student who could not attend school

One school child suffered severe groin swelling and dropped out of school due to debilitating lack of confidence. As a result, he fell into Child Labour. When the CCPC of Antwikwaa learned about this, they presented it to the department of Social Welfare and Community Development at the Twifo Heman Lower District, where they successfully received GH₵ 1,500 for his surgery. The student is now medically fit and has returned to school and left Child Labour activity.

Evaluation Methodology

Social Return on Investment

Social Return on Investment (SROI) is a framework for accounting for value creation, including social, economic, and environmental value. SROI enables organisations to measure how much change is being created or destroyed, and places a monetary value on the outcomes. In particular, an SROI analysis can help an organisation to understand whether a particular project or programme was worth the investment.

SROI is linked to the concept of 'Social Value', and the terms are sometimes used interchangeably. Social Value International describe Social Value as follows: *"Social value is about understanding the relative importance of changes that people experience and using the insights we gain from this understanding to make better decisions".*[9]

History of Social Return on Investment

SROI was first developed in the 1990s by Jed Emerson and REDF in the US. It was brought to the UK by the New Economics Foundation from 2002. The UK Cabinet Office then provided funding to develop the 'Guide to SROI' (published in 2009) and to establish the SROI Network.

In 2014 the SROI Network merged with the Social Impact Analysts Association to become "Social Value UK" and "Social Value International" respectively. There are now 25 national and regional Social Value networks.

More recently, the 'Social Value in Development and Humanitarian Assistance' (SVDHA) network was launched in 2020. As of January 2021, SVI has been collaborating with the United Nations Development Programme (UNDP) to support rollout and adoption of the SDG Impact Practice Standards.

Principles of SROI and Social Value

There are eight principles that underpin the social value approach.[10]

1. Involve stakeholders
2. Understand what changes
3. Value the things that matter
4. Only include what is material
5. Do not overclaim
6. Be transparent
7. Verify the result
8. Be responsive

The SROI methodology

There are six stages in calculating SROI:

1. Establishing scope and identifying key stakeholders
2. Mapping outcomes
3. Evidencing outcomes and giving them a value
4. Establishing impact
5. Calculating the SROI
6. Reporting, using and embedding.[11]

Fundamental to SROI is the involvement of stakeholders in the evaluation process, the measurement of broader outcomes such as wellbeing, and the allocation of monetary values to outcomes. In particular, many SROIs draw on the practice of measuring 'subjective wellbeing' (stakeholders' self-reported quality of life, life satisfaction etc), using tools developed by organisations such as the WHO and the OECD.

Social Value International mange the principles, standards, and guidance for SROI and Social Value assessments. They also facilitate a training, professional development, and accreditation process, in conjunction with Social Value UK.

[9] What is Social Value? - Social Value International
[10] Social Value Principles – Social Value International
[11] The Guide to SROI, Social Value International

Strengths of the approach

The SROI approach has enabled an understanding of the *value for money* created by the CESEC programme. It has also shown the impact of the programme on the health and wellbeing of stakeholders – both the children and adults impacted by the programme.

The SROI has also allowed an exploration of the trade-offs created by the CESEC programme. In particular, it allows a comparison of: a) the value created for children, through improved health, wellbeing, and education, with b) the value lost for some adults, through worse health and reduced household income that sometimes arises because households no longer draw on child labour to support them.

Limitations of the approach

The communities that participated in the research have been negatively affected by the Covid-19 pandemic. It is therefore challenging when exploring changes in household finances to differentiate between the impact of Covid-19 and the impact of child labour remediation.

In addition, there are three main methodological considerations:

1. While a large number of stakeholders were interviewed in the quantitative research process (860 in total), these are spread between a number of different subgroups. Individual subgroups sometimes have relatively small sample sizes, therefore.
2. A 'retrospective post-pre' approach was taken to measuring change (i.e. asking people about their situation *now*, and then their situation *before the child labour remediation*), rather than a traditional pre-post. This is because the evaluation process began when the CESEC programme had been running for some time. The possibility of recall bias should therefore be considered.
3. It was not practical (nor ethical) to create a true 'control group', where child labour was present, but remediation support not offered.

Image: Member of the Solidaridad team leading qualitative research with a VSLA Women Women's Group

Stakeholder research process

The CESEC programme is complex and extensive. As a result, there are a number of stakeholder groups and subgroups. Discussions with Barry Callebaut Head Office, Barry Callebaut Ghana, and supporting NGOs (Codesult and Solidaridad) were used to help in identifying all possible stakeholder groups.

Only stakeholder groups that experienced material outcomes are included in the SROI model. These include children and parents in households that supply Barry Callebaut, and those that do not supply Barry Callebaut. Included in the model are both households where child labour was identified, and remediation support provided, and households where child labour was not identified. The latter group is likely to be impacted through the preventative aspect of CESEC – reducing the likelihood of child labour being used in the future.

Figure 2 shows the material groups, the number of people in each group, and the short-hand for the groups that is used throughout the report.

Additional stakeholder groups may be impacted by the Community Action Projects – but these projects are not sufficiently advanced to measure the outcomes accurately at this stage (beyond their contribution to the outcomes for stakeholders already listed).

Primary research phases

Two phases of primary research were undertaken during the SROI process – a qualitative research phase and a quantitative research phase. These are described in more detail below.

The primary focus of the qualitative research phase was identifying the outcomes that were experienced by stakeholders. These outcomes were then measured in the quantitative research.

All of the stakeholder groups identified in Figure 2 were involved in these two phases of research. In addition, qualitative research was also conducted with the NGO partners and members of the CCPCs.

Figure 2: Stakeholder groups included in the SROI model

Group			Short-hand	Total number
Households that supply Barry Callebaut	Child labour identified in census, and have received remediation support	Children	BC children, RS	576
		Parents	BC parents, RS	344
	Child labour not identified in census	Children	Other children, RS	1,024
		Parents	Other parents, RS	709
Households that do not supply Barry Callebaut	Child labour identified by CCPC, and have received remediation support	Children	BC children, No RS	416
		Parents	BC parents, No RS	242
	Child labour not identified by CCPC	Children	Other children, No RS	4,038
		Parents	Other parents, No RS	5,815
VLSA	Women in VSLA groups		VSLA members	437

Qualitative research

Qualitative research was conducted to build an understanding of how the CESEC programme impacted people and communities, and to identify the outcomes created. The process was designed such that the sample size would be sufficient to identify all material outcomes experienced by stakeholders.

The qualitative research was conducted in April 2022 by Solidaridad. Access to the communities was facilitated by Barry Callebaut's Technical Officers, and the local NGO partners Codesult and Nyonkopa, who have been closely involved with the communities throughout the course of the CESCEC programme and therefore have a good level of trust and rapport with the community.

The research included:

- 13 focus groups across six districts. The groups were held with parents and children that experienced child labour remediation (either through Barry Callebaut, or through the work of the Community Child Protection Committees), women who participated in VSLAs, and households that have been supported by the Community Action Plan activities.
- 8 one-to-one interviews with members of the Community Child Protection Committees.

Quantitative research

The quantitative research involved the development of two questionnaires: one for adults and one for children. The surveys were drafted in English by Envoy Partnership, in collaboration with Solidaridad. They were then translated to the local language. Questions were read out loud by the interviewers to interview participants, and participants' answers were recorded by the interviewers on tablets.

Quantitative surveys were conducted with 860 people, including:

- those in households that supply Barry Callebaut, who had received child labour remediation support.
- those in households that do not supply Barry Callebaut, who had received child labour remediation support.
- those in households that supply Barry Callebaut, who had not received child labour remediation support.
- those in households that do not supply Barry Callebaut, who had not received child labour remediation support.

Children were aged between 5 and 19, although the vast majority (95%) are aged 8 to 17.

The sample size was chosen so as to be sufficient to give a reasonable estimate of the amount of change experienced by different subgroups.[12]

Figure 3: Quantitative research sample

Group			Target	Actual
Households that supply Barry Callebaut	Child labour identified in census, and have received remediation support	Children	150	173
		Parents	150	158
	Child labour not identified in census	Children	100	107
		Parents	100	110
Households that do not supply Barry Callebaut	Child labour identified by CCPC, and have received remediation support	Children	85	94
		Parents	90	94
	Child labour not identified by CCPC	Children	35	61
		Parents	40	63

In addition, the recruitment of children ensured a mix of sex, age, and children who had been undertaking hazardous and non-hazardous child labour. The recruitment of parents ensured a mix of sex, children's age, and whether children had been taking part in hazardous or non-hazardous child labour. Some of the women were also members of the VSLAs.

[12] It was not intended to show whether all the changes for all of the subgroups are statistically significant – this would have required a much larger sample size

Summary of research findings

The research suggests that the CESEC programme has had a significant impact on the lives of children affected by child labour and at risk of child labour. Headline results are shown in the charts on the next page.

Feedback from parents and children affected by the programme shows an increased understanding of various aspects of child labour, with 51% of adults interviews stating they are *less likely to use Child Labour*. Reasons include: better understanding the legal status of child labour, the risks of child labour to children's health and development, and the importance of education to their future opportunities. This increased understanding of the risks of child labour and the importance of education has led to changing attitudes to child labour and reductions in the quantity of hours worked by children.

Children who have experienced remediation now work fewer hours, and – in particular – they work less during school hours, and they do less hazardous forms of child labour. Children under 13 are now working on average 1.5 hour less per week on the farm, and children 13 or over are working on average 3.6 hours less per week. This in turn has reduced the frequency of injuries and health issues that children suffer, and has positively impacted their mental wellbeing.

Children now also attend school more frequently, and they perform better at school than previously. This change is generally greater for children aged 13 and above, probably because they were more likely to be engaged in work in the first instance than younger children. 17% more children over 13 now feel "confident at school.".

This improvement in children's health, education, and wellbeing is true both for children in households that supply Barry Callebaut, and for children in other households. The latter have been affected by the work of the CCPCs, rather than Barry Callebaut's direct intervention work. As a general rule, children in households that do *not* supply Barry Callebaut start in a worse position (with regards to labour, health, education, and wellbeing), but make a greater improvement.

The type of remediation support also impacts these outcomes to an extent; namely, children who received education materials as part of their remediation support, report more positive attitudes towards education, and a greater decline in work during school hours, than those who do not.

There were, however, some trade-offs. Improvements in the health and wellbeing of children sometimes led to decreases in the health and wellbeing of parents, as parents took on additional work that had previously been done by their parents.

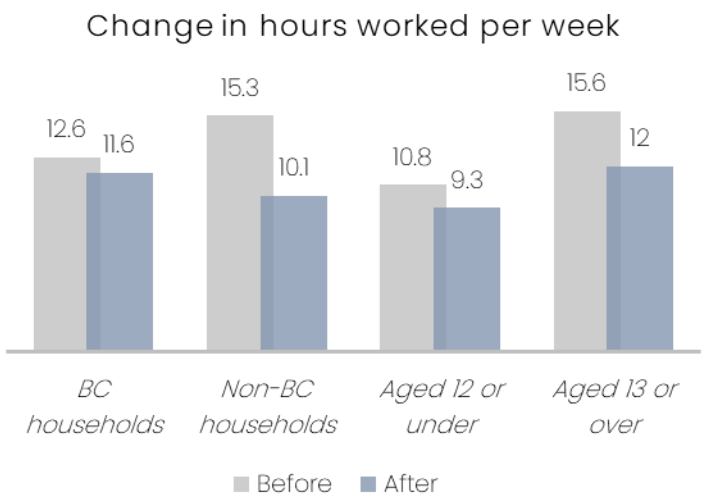
Furthermore, the impact on household finances has been negative overall. While it is difficult to unpick the impact of child labour remediation support and the impact of Covid-19, it does appear that the child labour remediation support has left some households worse off than before.

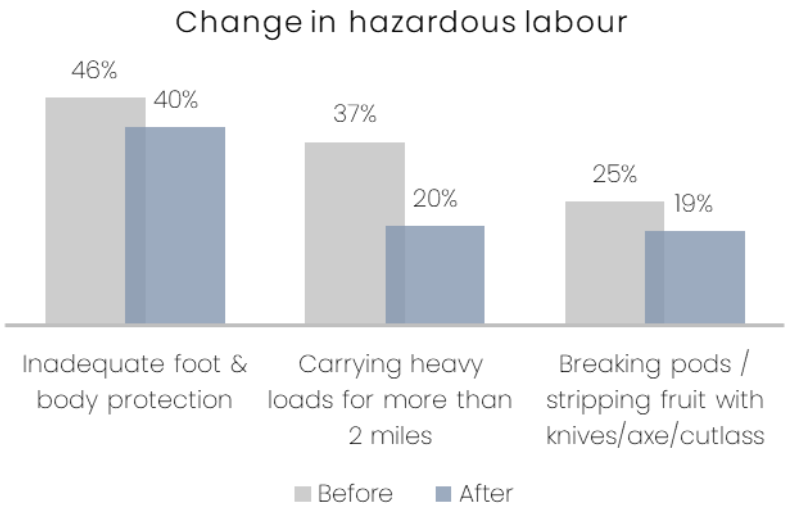
Summary of outcomes

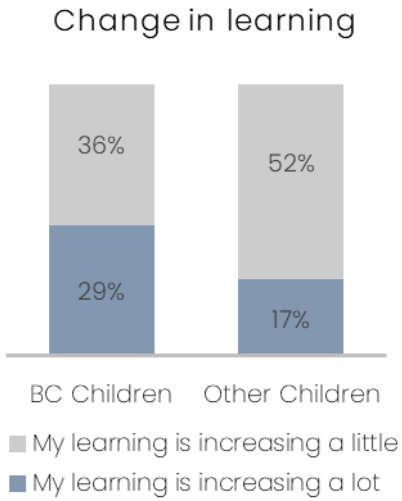
The main outcomes explored in the research are as follows:

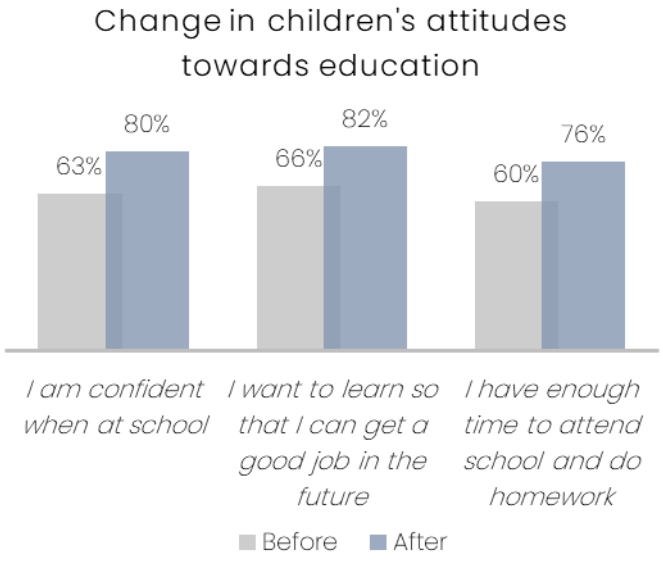
- Changes in amount and type of child labour (including prevention of child labour in the future)
- Changes in attitudes towards education, school attendance, and learning
- Changes in health (positive and negative)
- Changes in wellbeing (positive and negative)
- Changes in household finances

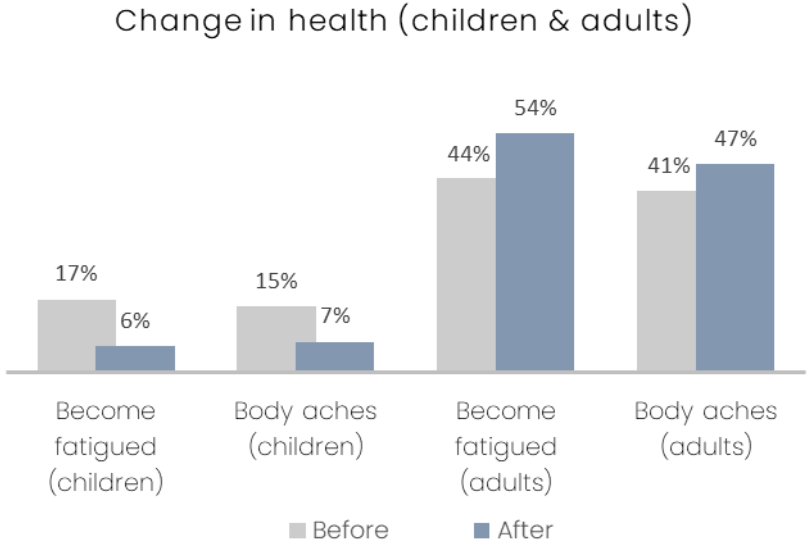
The following chapters explore these findings in more detail.

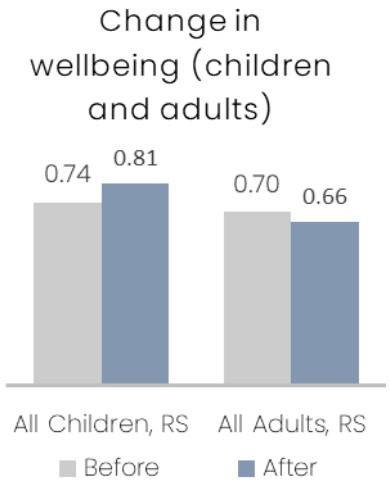












1. **Change in hours worked per week:** BC Children, RS: n = 135; Other Children, RS: n = 99; Children ages 12 or under: n = 92; Children aged 13 or over: n = 142
2. **Change in hazardous labour:** Children, RS: n = 256. (% saying "Frequently")
3. **Change in learning:** BC Children, RS: n = 135; Other Children, RS: n = 99
4. **Change in children's attitudes towards education:** Children, RS: n = 256. (% saying "frequently")
5. **Change in health:** Children, RS: n = 256; Adults, RS: n = 225. (% saying "Frequently")
6. **Change in wellbeing:** Children, RS: n = 256; Adults, RS: n = 225 (Average score, max=1)

Findings on changes in child labour

The research showed that levels of child labour have fallen among households that supply Barry Callebaut (by 1 hour per week on average), and those that do not supply Barry Callebaut (by 5.2 hours per week on average). Furthermore, a smaller proportion of children work 'frequently' or 'sometimes' during school hours (see Figure 3).

"Before remediation, I used to go to the farm every Friday, but I don't do that anymore. I attend school every day."

Hazardous work has also reduced. The proportion of all children who received remediation support who use machetes or long cutlasses for weeding and pruning has fallen by 6%, as has the proportion using knives, axes or cutlasses to break cocoa pods or strip fruit from branches (see Figure 4).

"Yes, we were always left with cuts and wounds, but it is not so anymore, so we are okay."

The proportion working without adequate foot and body protection has also fallen 6%, while the proportion carrying heavy loads has fallen by 17%.

"Before remediation, we used to carry heavy cocoa pods and that was really beyond us.... they no more allow us to do those things."

Figure 4: Change in no. of hours worked per week by children experiencing remediation support

Hours worked per week by children	*Before*	*After*	*Change*	*Base size*
In households supplying BC	12.6	11.6	-1.0	135
In households not supplying BC	15.3	10.1	-5.2	99
Aged 12 or under	10.8	9.3	-1.5	92
Aged 13 or over	15.6	12.0	-3.6	142
% working during school hours 'frequently' or 'sometimes'	*Before*	*After*	*Change*	*Base size*
In households supplying BC	8%	5%	-3%	135
In households not supplying BC	38%	13%	-25%	99
Aged 12 or under	16%	8%	-9%	92
Aged 13 or over	24%	9%	-15%	142

Figure 5: Change in hazardous labour performed by children experiencing remediation support

Households supplying Barry Callebaut	*Before*	*After*	*Change*
Using machete/long cutlass for weeding/pruning	20%	14%	-6%
Breaking cocoa pods with breaking knives, stripping fruit from bunches with axe or cutlass	25%	19%	-6%
Carrying too heavy loads for more than 2 miles	37%	20%	-17%
Working without adequate foot & body protection	46%	40%	-6%

(% saying Frequently or Sometimes). Base size = 256

Findings on education

The relationship between education, poverty and child labour is non-linear. The research showed that many parents ask their children to stay home from school to work on the farm. It also showed that even when children do attend school, many households cannot afford basic equipment required for school, and the children are often fatigued from working long hours. This led to children expressing frustration, and feeling discouraged from attending school.

"My friends used to laugh at me when I'm unable to answer a question in class; this made me shy"

As well as a reduction in hours worked, remediation has led to changing attitudes towards child labour, education, school attendance, and school performance.

The proportion of children saying they "frequently" feel confident at school (+17%), want to learn so they can get a job in the future (+16%), have enough time to attend school and do homework (+15%), and feel enthusiastic about going to school (+15%) have all increased (See Figure 6).

The proportion saying they are tired at school 'frequently' or 'sometimes' has also fallen from 25% to 8% (households supplying Barry Callebaut) and from 65% to 35% (other households). The proportions saying, they 'frequently' perform as well as peers, and that they 'frequently' learn well, has risen from 49% to 61% and from 62% to 70% (children in households supplying Barry Callebaut) and from 18% to 39%, and from 25% to 53% (other households).

Children's (and parents') aspirations for their future and career ambitions have also been impacted. The proportions of children saying they are 'frequently' optimistic about their chances of getting a job in the future has risen from 70% to 78% (households supplying Barry Callebaut) and from 40% to 62% (other households).

"I thought I was just attending school for attendance's sake and that nothing would come out of it. I thought I would become a farmer like my parents. After remediation, I realised I can also have a chance to get a good job after school."

In addition, 29% of children in households supplying Barry Callebaut say their learning is 'increasing a lot', and 36% say their learning is 'increasing a little'. The equivalent figures for other households are 17% and 52%. (Figure 7).

Figure 6: Change in children's attitudes to education

How often do you experience the following?	*Before*	*After*	*Change*
I am confident when at school	63%	80%	17%
I want to learn so that I can get a good job in the future	66%	82%	16%
I have enough time to attend school and do homework	60%	76%	15%
I am enthusiastic about going to school	67%	82%	15%
I feel optimistic about getting a good job in the future	61%	74%	13%
I perform as well as other children when I am at school	39%	51%	12%
My parents are pleased with my performance at school	40%	50%	11%
I learn well when I am at school	51%	62%	11%

All children experiencing remediation support. % saying 'frequently'. Base size = 256

Modelling future income

Two options were considered for projecting changes to the future income of children who experienced child labour remediation. One involved looking at the increase in proportion of days in which they attended school. The other involved looking at their increase in learning.

The increase in proportion of days in which children attend school is a more objective measure. However, the research showed that it was not just attendance at school that was affected by the CESEC programme; children were also better able to learn because – for example – they were less tired at school, or they had access to the school materials.

Furthermore, children who experienced remediation support and are from households that supply Barry Callebaut were already attending school frequently before (4.7 days per week on average), and so the increase was only 0.1 days per week (to 4.8 days per week). However, 65% of these children said that their learning is increasing post remediation support (see Figure 7).

Figure 7: Impact on education/learning

Hours worked per week by children	*BC Children*	*Other Children*
My learning is increasing a lot	29%	17%
My learning is increasing a little	36%	52%
No change in my learning	19%	18%
My learning is decreasing a little	13%	13%
My learning is decreasing a lot	2%	0%
Base size	135	99

Q. "*Thinking about your learning at school, which of the following statements do you agree with most? The child labour remediation activities have resulted in…*"

The change in attendance at school was therefore judged to not fully reflect the impact of the CESEC programme. Changes to future income are instead projected through increase in learning.

A score for children's learning was calculated by giving a numerical equivalent to each answer that children could choose from when asked about their learning.[13] **The average increase in learning for children receiving remediation support was +0.38 for children from households that supply Barry Callebaut, and +0.36 from other households.**

The age of the children is considered in the SROI model when calculating the quantity of additional learning created. The younger the child is when the remediation takes place, the greater the amount of additional learning that is likely to be created. For example a child who is currently 12 years old is likely to have been 11 years old when the remediation support took place. This means that they would have had a further four years of Junior High School remaining, and some will have had an additional three years of Senior High School. Therefore, they will have between four and seven years of improved schooling – taken to be five and a half years on average.[14]

During this 5.5 years, their educational attainment is estimated to be 38% higher for those from households that supply Barry Callebaut (as the average increase in learning was +0.38 – see above) and 36% for those from other households. In this example, the additional education would be estimated as 5.5 x 0.38 in this example. The resulting increase in future income is discussed on page 24.

[13] "My learning is increasing a lot" was scored at +1, "My learning is increasing a little was scored at +0.5, "No change in my learning" was scored at 0, "My learning is decreasing a little" was score at -0.5, and "My learning is decreasing a lot" was scored at -1.

[14] The SROI model works on the basis that all children are in school up to the age of 15 (i.e., the end of Junior High School), and that some children (assumed to be 50%) will then go on to Senior High School (which is non-compulsory and requires students to pass the "BECE" (Basic Education Certificate Examination) in order to attend). Furthermore, children are assumed to have been, on average, one year younger than their current age when the remediation came into effect – as remediation has taken place over the past two years.

Findings on attitudes towards child labour

Changes in parents' approach to child labour appear to be driven primarily by a greater understanding of the value of children's education, and the acknowledgement of the direct conflict that child labour creates with the chance for their children to succeed.

Parents reported during the research that this was more of a driver to changes in their behaviour than the fear of being caught using child labour. Nonetheless, the research shows that being caught using child labour remains a concern for many – partly because of any potential repercussions from the authorities, and partly because of the growing stigma around using child labour in communities.

The sensitisation work also appears to have had a preventative affect. Parents that have *not* been identified as using child labour are reporting that they are now less likely to use child labour during school hours than before. Their broader attitudes to child labour and education have also changed.

Education on the physical harm of hazardous child labour has encouraged parents to rethink both the amount, and the nature, of the work that their children complete. Children revealed that they are doing less work with heavy objects or dangerous tools and doing more "light work" instead.

"Now…I just fetch water for my father…if you are even trying to do something beyond your strength, they will ask you to stop so you don't get hurt and be able to attend school on Monday." (Other Children RS)

Figure 8: Parents' attitudes towards education and child labour

Percentage of those who have not experienced remediation saying 'Yes'	BC Parents, RS	Other Parents, RS	Base size (RS/No RS)
I am anxious about being reported for child labour concerns	56%	83%	134/91
I believe supporting the family by working hard on the farm demonstrates a child's strength and health	10%	43%	134/91
I am more anxious about my farm because of reductions in child labour	23%	53%	134/91
I am more anxious because of reductions in child labour	21%	52%	134/91

Percentage of those who have not experienced remediation saying 'Yes'	BC Parents, No RS	Other Parents, No RS	Base size (RS/No RS)
I am more worried about being reported for child labour than before	6%	14%	85/35
My views on the dangers of child labour for children have changed	11%	29%	85/35
My views on the importance of school for children's futures have changed	71%	69%	85/35
I have access to other help or other resources which mean that I would not need to use child labour	54%	9%	85/35

Findings on health

Children explained how they now experience fewer injuries and health complications, as a result of the remediation support. Children described reductions in back pains, cut and wounds and neck pains, resulting from reductions in hazardous labour.

"Before remediation, the children frequently became sick as a result of the hard work. This situation has changed, now they don't get sick as they did before." (BC Parents RS)

"Formerly we used to really get tired, you'll have back pains and all, but now these things have reduced." (BC Children RS)

"Yes, we were always left with cuts and wounds, but it is not so anymore, so we are okay" (Other Children RS)

"I had neck pains from carrying firewood, but because I go to school now, it has stopped. I also used to have an effect from carrying the firewood on my head, but it has stopped." (BC Children RS)

However, the reduction in Child Labour has, in many cases, put more of a strain on their parents to complete the additional workload. This has had some negative implications for their health.

Adults discussed increased feelings of fatigues, pains, and sickness.

"It has affected my health. I always come home very tired because the children who offer extra helping hands no longer do it." (BC Parents RS)

"The children used to help us on our farm, now it's left with my wife and I. I have waist pains. My partner and I are always sick. We force ourselves to do work that is above our strength." (BC Parents RS)

"Now, one person is weeding four cocoa farms without any helper. You finish weeding one then you go to the next one. By the time you finish with your work, you will be sick. But if there was a helper, the sickness wouldn't have been frequent." (BC Parents RS)

However, these negative changes for parents are smaller in scale than the positive changes for children – and it is expected that they are less likely to lead to longer term issues.

Quantifying changes in health

Changes in health were measured through pre-post questions. Participants are asked about how frequently they suffered from certain accidents or health conditions *now*, and then asked about the frequency of those accidents or health conditions *before the remediation*.

Questions were asked about the accidents or health conditions that were identified in the qualitative research. The questions themselves were drawn from the qualitative research, and the Ghana Hazard Activity Framework section on health incidences related to agriculture.[15]

The questions were as follows:

- I become fatigued
- I suffer from body aches
- I suffer from skin irritation
- I suffer from headaches
- I suffer from neck or shoulder pain
- I suffer from cuts or wounds from harvesting implements, e.g., cutlass, hoe, axe, Malayan knife, harvesting axe
- I suffer from injuries caused by falling fruits, particles, and tree branches during rainstorms

[15] Hazardous Child Labour Activity Framework for Ghana (HAF)

- I suffer from burns
- I suffer from sight problems from direct sunrays in the eyes when harvesting cocoa
- I suffer from insect and bites, including bee stings and snake bites

Figure 9 shows the proportion of children saying they 'frequently' experience the various health conditions measured – both before and after the remediation support. The biggest changes are for 'become fatigued' and 'body aches' for those children in households that do not supply Barry Callebaut (-17% and -13% respectively).

A score for health was calculated by giving each statement a numerical equivalent.[16] This was used to calculate the change in health in the SROI model.

For parents of households that supply Barry Callebaut, and have received remediation, health generally got worse. Figure 10 shows the proportion of parents saying that they 'frequently' experience the health conditions measured.

Figure 9: Impact on Children's Health

Households supplying Barry Callebaut	Before	After	Change
Become fatigued	10%	6%	-4%
Body aches	7%	4%	-3%
Skin irritation	5%	4%	-1%
Headaches	14%	13%	-1%
Neck or shoulder pain	6%	2%	-4%
Cuts or wounds from harvesting implements	2%	1%	-1%
Injuries caused by falling fruits, particles, branches	1%	1%	-
Burns	0%	2%	+2%
Sight problems	2%	1%	-1%
Insect and animal bites	12%	7%	-5%

How often do you experience the following? (% saying 'Frequently). Base size = 145

Households not supplying Barry Callebaut	Before	After	Change
Become fatigued	23%	6%	-17%
Body aches	23%	10%	-13%
Skin irritation	5%	5%	-
Headaches	13%	14%	+1%
Neck or shoulder pain	6%	11%	+5%
Cuts or wounds from harvesting implements	2%	6%	+4%
Injuries caused by falling fruits, particles, branches	2%	0%	-2%
Burns	1%	2%	+1%
Sight problems	4%	4%	-
Insect and animal bites	2%	2%	-

How often do you experience the following? (% saying 'Frequently). Base size = 56

[16] "Frequently, i.e. most days" was scored at 08; "Sometimes, i.e., one or two days per week" was scored at 0.3; "Rarely. For example, at Harvest time only" was scored at 0.1; and "Never" was scored at 0.

Figure 10: Impact on Adult's Health

Households supplying Barry Callebaut	Before	After	Change
Become fatigued	51%	56%	+5%
Body aches	45%	54%	+9%
Skin irritation	3%	2%	-1%
Headaches	19%	14%	-5%
Neck or shoulder pain	21%	26%	+5%
Cuts or wounds from harvesting implements	5%	4%	-1%
Injuries caused by falling fruits, particles, branches	1%	0%	-1%
Burns	0%	0%	-
Sight problems	15%	10%	-5%
Insect and animal bites	24%	25%	+1%

How often do you experience the following? (% saying 'Frequently). Base size = 109

Households not supplying Barry Callebaut	Before	After	Change
Become fatigued	36%	51%	+15%
Body aches	36%	40%	+4%
Skin irritation	2%	2%	-
Headaches	18%	26%	+8%
Neck or shoulder pain	16%	28%	+12%
Cuts or wounds from harvesting implements	4%	2%	-2%
Injuries caused by falling fruits, particles, branches	0%	1%	+1%
Burns	0%	1%	+1%
Sight problems	7%	5%	-2%
Insect and animal bites	0%	1%	+1%

How often do you experience the following? (% saying 'Frequently). Base size = 60

Image: Solidaridad team conducting quantitative research with children

Findings on wellbeing

The qualitative research showed how the reduction in child labour and increase in education boosted children's wellbeing. Children spoke about their self-esteem, confidence, enthusiasm, and optimism about the future. One child explained they feel "more hopeful about [their] future" because of their improved performance at school, while another child spoke of how their anxiety has reduced since their parents' requests for them to work on the farm have decreased.

"I used to be very anxious because every morning when you wake up, you'll be asked to go to the farm. But it is no more."

Wellbeing was measured using the WHO (Five) Well-Being Index,[17] which asks participants to consider five statements. Participants were asked to *"indicate for each of the five statements which is closest to how you have been feeling over the last two weeks.* They were then asked about how they felt *before* the remediation. The five statements are as follows:

- I have felt cheerful and in good spirits
- I have felt calm and relaxed
- I have felt active and vigorous
- I woke up feeling fresh and rested
- My daily life has been filled with things that interest me

For each of the statements, participants were asked to choose between six answer choices. The results are shown in Figure 11. A score for wellbeing was also calculated by giving answer choices a numerical value[18]. For children from households that supply Barry Callebaut, and that have received remediation, the average change in wellbeing was +0.03. For children who had received remediation support, but are from households do not supply Barry Callebaut, this change was greater, at +0.11. Adults receiving remediation support from households that supply Barry Callebaut experienced a decline in Wellbeing of 0.05; adults who do not supply Barry Callebaut experienced a wellbeing decline of 0.03.

"Concerning our health and wellbeing it's not good…we have to force ourselves to do extra work on the farm. This has really affected our health."

Figure 11: Change in children and adult wellbeing scores

Change in wellbeing total score	*Before*	*After*	*Change*	*Base size*
BC Children, RS	0.80	0.84	+0.03	99
Other Children, RS	0.67	0.78	+0.11	145
BC Children, No RS	0.79	0.89	+0.1	56
Other Children, No RS	0.71	0.83	+0.12	75
BC Adults, RS	0.70	0.65	-0.05	159
Other Adults, RS	0.69	0.66	-0.03	97
Other Adults, No RS	0.73	0.68	-0.05	109
Other Adults, No RS	0.66	0.61	-0.04	60

[17] WHO-5 questionnaire - English (psykiatri-regionh.dk)

[18] "All of the time" was scored 1, "Most of the time" was scored 0.8, "More than half of the time" was score 0.6, "Less than half of the time" was scored 0.4; "Some of the time" was scored 0.2, and "At no time", was scored 0.

Findings on household finances

Parents gave mixed responses when asked about the impact of the CESEC programme on their finances. Households have saved money on their children's health due to fewer injuries, but in some cases they are having to spend more money on adult health care. As children are working on the farm less, households are spending more money on adult labourers or mechanized solutions, and some reported a decrease in earnings and productivity on their farm.

"It's very hard financially because the money that we will use to feed our families has to be channelled into hiring farm laborers."

Some households have benefitted from the provision of school equipment, but others – who did not receive school equipment – have reported having to spend more on education due to the increased school attendance of their children.

"The team supports the children with school uniforms, books, and pens. This has supported me because the money that I would have used... can be saved for other purposes"

Households supplying Barry Callebaut seem more equipped to deal with the impact of reduction in Child Labour: they are able to spend more on adult labour, experience less of a decline in earnings, and do not have to spend as much on adult healthcare, compared to other households that experienced remediation support.

More broadly, Covid-19 appears to have made the economic situation significantly more challenging for families – although this was not addressed directly in the research.

VSLAs and CAPs

The VSLAs and the CAP are intended to help alleviate poverty – and the research suggests that there has been some success. Feedback from VSLA members shows that they have led to increased savings and improved money management.

"In times of hardship, we can get loans from the VSLA to take care of our children's school needs. That is why we came to join the VSLA."

On their own, however, VSLAs do not appear to be sufficient to offset the economic challenges facing communities, and overall anxiety about finances has risen.

The CAPs appear to be a useful tool for communities. Research participants viewed the creation of the CAP as inclusive and felt that it focused on the right priorities for the community. They also believed that CAP activities would positively contribute to reducing Child Labour. However, at this stage, many of the CAP projects have not been completed – sometimes due to lack of resources or finances. It is too early therefore to assess their long-term impact.

Modelling changes in households' income

Changes in household income are quantified through parents' self-reported change in household income. Changes are quantified in two parts – firstly for VSLA members, and secondly for parents that have experienced remediation. These changes in household income are outlined in in the Household Finance section.

In the SROI model, the changes in household income are assigned to one parent only in order to avoid double counting – although all members of the household may be affected.

Figure 12: Change in households finances

Change in spending on school materials	A. Proportion saying "Yes"	B. Average amount per month for those saying Yes"	Base size (A./B.)
BC Parents, RS	60%	GH₵ 136	159/95
Other Parents, RS	49%	GH₵ 77	97/48
BC Parents, No RS	72%	GH₵ 173	169/116
Other Parents, No RS	63%	GH₵ 113	60/38

Q. *"Since the remediation process / 2 years ago my household has had to spend additional money on* ***school materials****"*

Change in spending on adult labour	A. Proportion saying "Yes"	B. Average amount per month for those saying Yes"	Base size (A./B.)
BC Parents, RS	53%	GH₵ 194	159/82
Other Parents, RS	38%	GH₵ 152	97/37
BC Parents, No RS	63%	GH₵ 192	169/100
Other Parents, No RS	52%	GH₵ 132	60/31

Q. *"Since the remediation process / 2 years ago my household has had to spend additional money on* ***adult labour****"*

Change in spending on adult healthcare	A. Proportion saying "Yes"	B. Average amount per month for those saying Yes"	Base size (A./B.)
BC Parents, RS	15%	GH₵ 86	159/24
Other Parents, RS	34%	GH₵ 106	97/33
BC Parents, No RS	30%	GH₵ 83	169/49
Other Parents, No RS	27%	GH₵ 83	60/16

Q. *"Since the remediation process / 2 years ago my household has had to spend additional money on* ***adult healthcare****"*

Change in spending on children's healthcare	A. Proportion saying "Yes"	B. Average amount per month for those saying Yes"	Base size (A./B.)
BC Parents, RS	15%	GH₵ 71	159/24
Other Parents, RS	25%	GH₵ 73	97/24
BC Parents, No RS	21%	GH₵ 72	169/135
Other Parents, No RS	20%	GH₵ 55	60/12

Q. *"Since the remediation process / 2 years ago my household has had to spend additional money on* ***children's healthcare****"*

Decrease in farm earnings	A. Proportion saying "Yes"	B. Average amount per month for those saying Yes"	Base size (A./B.)
BC Parents, RS	15%	GH₵ 122	159/24
Other Parents, RS	15%	GH₵ 147	97/14
BC Parents, No RS	39%	GH₵ 188	169/56
Other Parents, No RS	25%	GH₵ 304	60/14

Q. *"Since the remediation process / 2 years ago my household* ***earns less money*** *because my farm is* ***less productive"***

Findings on preventing future child labour

The SROI model accounts for the impact of CESEC in preventing future child labour, as well as reducing and remediating existing child labour.

Adults who had not experienced child labour remediation were asked whether they are less likely to use children to help them at work than before [the CESEC programme], and whether they would ask their children to help at work, even during school hours.

In total 36% of parents from households that supply Barry Callebaut, and 56% of other parents, said that they are less likely to use children to help them at work than before, *and* that they would not ask their children to help them during school hours.

The estimated amount of child labour prevented by the CESEC programme draws on this data, along with estimates of child labour in Ghana (UNICEF have estimated that the child labour rate in Ghana is 21%).[19]

Child labour prevention is calculated as follows:

- Households that supply Barry Callebaut: 21% (child labour rate) * 36% (level of change in child labour) = 8%
- Households that do not supply Barry Callebaut: 21% (child labour rate) * 56% (level of change in child labour) = 12%

This means that, in total 740 adults and 554 children are affected by the avoided increase in child labour.[20]

The calculated avoided child labour rate aligns with other research. Research into the impact of Covid-19 on poverty in Ghana found that, as of 2020, if countries were not able to mitigate the economic impacts of COVID-19, around 168.9 million children would be in child labour by the end of 2022. The research also emphasises that children in low-income countries like Ghana are particularly at risk of experiencing child labour. Because of expansive school closures, increased unemployment and lost family members due to COVID-19, Ghanaian children have become more susceptible to child labour since the pandemic started.

The research above projected an increase in child labour of c. 8% in Ghana between 2020 and 2022 if no action was taken to address child labour.[21] This is close to the 8% and 12% figures calculated in the SROI. The CESEC programme is targeted at high risk areas, meaning that it would not be surprising if the figures in communities where CESEC operates are a little higher on average than elsewhere.

[19] Ghana Tackles Child Labour in Cocoa Areas (modernghana.com)

[20] *For most groups, more children are impacted than adults. Barry Callebaut data suggests that more adults are reached than children for households that do NOT supply Barry Callebaut, and have NOT received remediation support. However – the outcomes for the adults are based on changes in labour practices for the children – so it does not make sense to incorporate more adults than children in the model. Therefore the number of adults has been adjusted down. It was assumed that the ratio of parents affected to children affected would be the same for those that have not received remediation, as those that have received remediation. As a result, the model works on the basis of 277 rather than 686 adults.*

[21] The Impact of COVID-19 on Poverty in Ghana - The Borgen Project

Calculating the SROI: Giving outcomes a value

SROI requires that all material outcomes are given a monetary value. This means that a 'financial proxy' (i.e., an approximation of monetary value) was developed for the changes in health, wellbeing, and long-term income.

Valuing improved well-being

A healthcare economics approach has been used to value changes in health and wellbeing. This involved expressing health and wellbeing outcomes in terms of 'health status', in units of Quality Adjusted Life Years (QALYs) and Disability Adjusted Life Years (DALYs).

The SROI draws on the most commonly used valuation approach, by calculating the value of a QALY or a DALY as 2 x Gross National Income per Capita. Gross National Income per Capita is GH₵ 14,104 in Ghana, meaning that the value of one QALY or DALY is GH₵ 28,208.

However, only part of a QALY can be attributed to mental well-being. The widely used EQ-5D measure has therefore been used to estimate what share of a QALY we should attribute to mental well-being. EQ-5D is "a standardised measure of health status developed by the EuroQol Group in order to provide a simple, generic measure of health for clinical and economic appraisal".[22]

The change in mental health from 'severe' to 'slight' in 'Anxiety / depression' domain from the EQ-5D scale was taken to be equivalent to moving from the bottom of the wellbeing scale used in the children and parent surveys, to the top of this scale, and is equivalent to 0.289 QALYs. In practice, this means that every 1% increase in wellbeing leads to an increase in value of 1% x 0.289 QALYs x GH₵ 28,208 per QALY = GH₵ 82 (per person per year).

Valuing improved health

For changes in health, 'disability weightings' were used from various publications that draw on the Global Burden of Disease study. These disability weightings reflect the average impact of accidents or health conditions on health status – represented in DALYs. For example, for "I suffer from neck or shoulder pain", the disability weighting for "Neck pain: moderate" was used, which is 0.114.[23]

Valuing long-term income

A report by the Africa Growth Initiative at Brookings explores the impact of education on earnings. It suggests that completing primary school leads to an increase in income of 8% (compared to completing no schooling). Likewise, completing junior secondary leads to an increase in income of 38%, and completing secondary or higher leads to an increase in income of 79%. Another analysis of the same data shows that additional schooling [per year] yields a seven percent increase in earnings.

The Ghana Living Standards Survey (GLSS) shows the average monthly wage for various occupations. It shows that for 'elementary occupations', the average monthly income is GH₵ 597.

The SROI model estimates the increase in earnings created for children by the CESEC programme. It uses the average monthly income for 'elementary occupations' as a baseline for income. It then projects a 7% increase in income for each unit of 'additional learning'.

[22] https://euroqol.org/wp-content/uploads/2021/01/EQ-5D-5LUserguide-08-0421.pdf

[23] The global burden of injury: incidence, mortality, disability-adjusted life years and time trends from the Global Burden of Disease study 2013

Calculating the SROI: Establishing 'impact'

'Establishing impact' requires consideration of several different factors, to ensure that the SROI incorporates considerations such as 'what would have happened anyway?', the contribution of other people or organisations to the value creation, and the length of time for which outcomes are expected to last. These are outlined below:

Deadweight

Deadweight is the consideration of 'what would have happened anyway?'. Typically in an SROI, the deadweight is a proportion of the outcome that was measured.

In this SROI, the deadweight is the reverse of this. Rather than assuming that some of the reduction in child labour would have happened without the CESEC programme, the SROI works on the basis that the CESEC programme prevented an increase in child labour. This means that none of the reduction in child labour would have happened anyway, and, furthermore, there would have been an increase in child labour elsewhere. This means that deadweight is built into the measurement of outcomes (as discussed above) and does not need to be considered separately.

Attribution

Attribution is a measure of the credit that the CESEC programme can take for the value created, once the contribution of other factors is considered. In some instances, an intervention might be *necessary for the change*, but not in itself *sufficient*. A good example of this is the increase in long-term income for children: the CESEC programme may be necessary for children to perform better at school, and therefore earn more money in the long-term. However, many other factors are also necessary – such as investment in the education system. Attribution levels for this SROI are shown in Figure 13.

Displacement

Displacement is where some of the value is not actually created, but moved – or 'displaced' – from someone else or somewhere else. A typical example would be where an anti-crime initiative reduces crime in an area, but some of that crime moves somewhere else.

There are examples of displacement in the CESEC programme – but these are already accounted for in the outcomes. Sometimes, part of the improvement in health and wellbeing among children is 'displaced' to their parents – whose health and wellbeing might fall as they take on more work. As this is accounted for in the additional outcomes, a separate displacement calculation is not needed.

Benefit period

Value is calculated for a period of 20 years. However:

- Health and wellbeing outcomes are projected to last nine years – as this is the average length of time left before children graduate from school
- Household financial outcomes last for three years. The research showed that these outcomes are substantially affected by other factors and events (e.g., Covid-19) and are likely therefore to change in the relatively near future.
- Children's future income is not accrued until children finish school. Within the SROI model, the future income is modelled separately for each cohort of children – i.e., those who are currently aged six, those who are currently aged seven, and so on – up to those who are currently aged 17. The model assumes that children are equally spread across these age categories.
- Savings created for VSLA members are projected to last for 10 years.

Outcome drop off and attribution drop off

When outcomes are projected into the future, both the amount of outcome experienced by stakeholders, and/or the attribution due to CESEC, may reduce over time. This is referred to 'outcome drop off' and 'attribution drop off' respectively.

The outcome and attribution drop off is outlined in Figure 14.

Figure 13: Attribution Rationale

Outcome	Attribution level	Rationale
Health outcomes	100%	Changes in health (positive or negative) are almost entirely due to changes in working practices – which have been created by CESEC.
Wellbeing outcomes	BC parents, RS: 27% BC children, RS: 47% Other parents, RS: 37% Other children, RS: 70%	Stakeholders were asked directly about the impact of child labour remediation (or the VSLA programme) on their wellbeing
Household financial income	75% for VSLA, 25% for others	The VSLA component of the model incorporates *just* the additional savings, which are largely due to the CSEC programme. For others – while the CESEC programme has had an impact on finances – other economic factors (especially Covid-19) have had a bigger impact.
Future income	20%	While important, CESEC is only one factor among many that leads to children receiving the education they need for a successful career.

Figure 14: Drop Off Rationale

Outcome	Drop off
Health outcomes, Wellbeing outcomes, and household finance outcomes	**Outcome drop off:** These outcomes reduce over time to reflect the proportion of children who are no longer children – and for whom the direct and indirect outcomes will no longer apply. It falls from 100% (of the original outcome amount) in year 1, to 67% in year 2, 58% in year 3, 50% in year 4, 42% in year 5, 33% in year 6, 25% in year 7, 17% in year 8, and 8% in year 9. The drop off is particularly steep in year 2 as it is assumed that there is only one year of benefit for children aged 15 and above (and their parents). Whereas children aged 14 (and their parents) get two years of benefit, children aged 13 (and their parents) get three years of benefit etc **Attribution drop off**: Each year, attribution reduces by 10% of the previous year's attribution level..
Future income	**Outcome drop off:** No outcome drop off. **Attribution drop off:** The attribution reduces to reflect the increasing importance of work experience to a person's career over time, and the decreasing importance of their school education. The model weighs up the number of years of school (assumed to be 15), and the number of years work experience. In the second year of working, the attribution is 94% of the original amount (15 ÷ 16, where 15 is the number of years in school, and 16 is the number of years of school *and* work experience). In the third year of working, the attribution is 88% of the original amount (15 ÷ 17, where 15 is the number of years in school, and 17 is the number of years of school *and* work experience), etc.
Household savings (VSLA)	**Outcome drop off:** No outcome drop off **Attribution drop off:** Each year, attribution reduces by 20% of the previous year's attribution level.

Results and conclusions

Total value created

The SROI model gives an estimate of the total social value created by the CESEC programme. It shows that the CESEC programme leads to the creation of c. GH₵ 19 million in social value[24] – equivalent to €2.7 million.[25] Of this, GH₵ 8.4 million is directly attributable to the CESEC programme value – equivalent to €1.2 million.[26]

The total value created for each stakeholder group is shown in Figure 15.

Investment in CESEC

The total investment in CESEC for the whole period of the project was c. € 900,000.

However, the budgeted investment in CESEC is split between four 'results'. The first of these results covers the Community Action Plans. As it is too early to assess the impact of the Community Action Plans, the SROI does not include any value that they might create. Because of this, the investment in the Community Action Plans is excluded. This leaves a total investment of approximately € 800,000.

SROI ratio

This means that for every €1 invested in the CESEC programme, approximately €3.70 of value is created. Of this, approximately €1.60 is directly attributable to the CESEC programme. This shows a significant return on investment for the CESEC programme.

Interpreting the SROI ratio

The results shows a strong positive return on investment, and suggests that the CESEC programme demonstrates good value for money. There are several factors that need to be considered when interpreting the SROI ratio:

1. The estimate of social value is likely to be an under-estimate. This is for a number of reasons:
   a) While the immediate impact of avoiding hazardous child labour on children's health has been incorporated into the SROI, it has not been possible to project the *long-term* impact of avoiding hazardous child labour on children's health and development.
   b) While the long-term financial impact of improved education has been incorporated into the model, it has not been possible to project the long-term impact of improved education (and improved economic opportunities) on wellbeing.
   c) If the CESEC programme were to contribute to a longer-term change in attitudes around child labour, then the preventative component would lead to further value creation – for children who are currently too young to be involved in child labour, but might otherwise have been involved in child labour in the future. Future research may show this to be the case – and might lead to an increased SROI ratio. (At the same time, further economic challenges in the future might

[24] A discount rate of 7% is applied (in line with other studies and the World Bank. (For example, see: For example, see: https://docs.wfp.org/api/documents/WFP-0000108072/download/)

[25] Conversion rates between GH and € varied through the course of the CESEC programme. A conversion rate of GH₵ 7 per €1 has been used for the purpose of comparing investment and outcomes and calculating the SROI. This rate reflects an approximate average for the duration of the project. The rate was 6.786 GH₵ to 1 € on 1st August 2020, and 8.335 GH₵ to 1 € on 30th June 2022 (the end of the project). Most of the change in exchange rate has come in the last six months of the project; the exchange rate on 1st January 2022 was 7.004 GH₵ to 1 €.

[26] See box on next page for a description of 'total social value' and 'attributable social value'

mean that further intervention is needed to maintain some of the progress made).

2. A relatively high proportion of the value is long-term. While the CESEC programme is fundamental in realising that long-term value, other factors are also important (such as the quality of the education system). The relatively low share of the value that is directly attributable to the CESEC programme is therefore a reflection of the role that the programme plays in the wider system. One risk of focusing too much on the SROI ratio (at the expense of the wider evidence of the evaluation) is that this may encourage a focus on projects that create shorter-term, more certain results, rather than longer-term results that are more likely to be affected by other factors in the future.

3. While a lot of value is created for children, a lot of value is also lost for parents. Some of this may be inevitable – such as some of the financial consequences for households. However, other factors should be considered when interpreting this data:

   a) Isolating the effects of Covid-19, especially on household finances, is challenging. It might be that – without the Covid-19 pandemic and with a more secure economic situation – the negative impact on households finances would have been less.

   b) It is too early to fully understand the impact of the Community Action Plans. It may be that – in the future – the projects that arise from the Community Action Plans have an additional impact. (Although if these were incorporated into the SROI then the costs of the CAPs would also need to be incorporated). At the same time, the research to this point suggested that there are issues with completion of some of the projects.

   c) There may be other initiatives that Barry Callebaut and partners could undertake

'Total social value' and 'attributable social value'

The difference between the total social value and the attributable social value is as follows:

- The total social value includes all of the value that has been created, and that would not have been created without the CESEC programme. For example, it includes all of the value created in the future when children who experience child labour remediation go on to have a better education – and earn more income – as a result. The CESEC programme is *necessary* for this value creation – but it is not *sufficient*. Other factors also contribute – such as quality education provision, and the ongoing efforts of the children themselves. The total social value figure is useful because it shows the value created or enabled by the CESEC programme.

- The attributable value is an estimate of how much of the total value can be claimed by the CESEC programme. The attribution rate determines how much of the immediate value is credited – or attributed – to the CESEC programme. The attribution rate typically reduces over time (calculated through the 'attribution drop off') – for example, the share of the attribution that the CESEC programme can take for future earnings of children who experience child labour remediation will be higher when those children are 20, than when they are 40. By the time they are 40, other factors will be increasingly important. The attributable social value figure is useful because it helps avoid overclaiming when considering questions around value for money.

to lessen the negative impact on parents. Analysing potential initiatives is beyond the scope of this evaluation – but anything that might help farmers become more efficient and adapt to the lack of support from their children on the farm may help reduce the negative value to parents.

4. The SROI ratio is broadly comparable to similar projects that seek directly to reduce child labour.[27] While the SROI ratio for the CESEC programme is a little lower, this is primarily because this SROI has been able to incorporate the negative impacts of reducing child labour on other people (primarily the impact on parents' health and on household finances) which has not usually been possible in other SROI evaluations. Furthermore, these negative impacts are likely to have been exacerbated by the impact of the Covid-19 pandemic.

Figure 15: Value created per stakeholder

Stakeholder	Value created (GH₵, thousands)	Attributable value created (GH₵, thousands)
BC children RS	6,425	1,705
BC parents RS	-1,212	-120
Other children RS	5,265	2,498
Other parents RS	-760	-289
BC children No RS	652	199
BC parents No RS	-191	-19
Other children No RS	6,025	2,859
Other parents No RS	-869	-331
VLSA members	3,729	1,927

[27] The main comparison is the SROIs completed by the ECLT Foundation: https://www.eclt.org/en/publications

Considerations for Barry Callebaut

The SROI analysis points to some further considerations around measurement and evaluation, and how SROI could be better used for evaluation programmes in the future.

1) A significant quantity of primary research has been conducted as part of this SROI. This has been made possible both by the keeping of records of beneficiaries, and by the community access that has been facilitated by Barry Callebaut, Codesult, Solidaridad, and others. Similar record keeping and community access in future projects will help facilitate further SROI analysis.

2) There are some elements of the SROI process that might be built into the regular monitoring processes that take place in programmes such as CESEC. For example, Barry Callebaut might develop a set of questions on health (such as fatigue, accidents involving cuts or wounds, head and body aches) that might be asked of parents and/or children earlier in the process. This might enable a more traditional pre-post analysis in the future (rather than the 'retrospective post-pre' analysis used in this SROI, where participants are asked to recall their health before the remediation support), as well as increasing the quantity of data.

3) Further research on the long-term health and economic benefits of avoiding child labour (and increasing education) would be useful – both in Ghana and in other countries where child labour is a significant issue – is recommended. This will help improve the robustness of long-term projections.

4) One challenge of the CESEC SROI (and other SROIs which include a community development focus) is that the outcomes can be diverse, and it can be more challenging to ensure that the activities and outcomes that are considered in scope align with the costs that are in scope. Planning at the outset of a project on what an SROI analysis might require – and therefore what additional monitoring would contribute – would help reduce this challenge.

5) One challenge of the CESEC SROI (and other SROIs which include a community development focus) is that a significant number of distinct, heterogeneous outcomes are created. This creates two issues for the SROI calculations:

    a. It can be easy to miss one-off outcomes that create a lot of value for an individual stakeholder (for example, a medical intervention with a child) – because if the outcome only occurs for one individual then it is unlikely to be picked up in the research. Therefore, while outcomes that apply to many stakeholders – such as reduced fatigue or increased wellbeing – are included, wider medical outcomes are excluded, even if they create a significant amount of value. This might be addressed through a monitoring system that more rigorously documents such interventions and outcomes.

    b. It is not always clear which funding stream (or 'result' in the case of the CESEC programme) an outcome should fall under, making it more challenging to analyse the value for money of individual activity areas.

6) The preventative component of the CESEC programme is important for calculating social value. A formula was developed in this SROI to estimate the quantity of child labour that was avoided. However, the approach used could be tested and refined in the future, increasing the robustness of estimates of child labour prevention.

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