

Background Paper

Mapping Child Labour Risks in Global Supply Chains

An Analysis of the Apparel, Electronics and Agricultural Sectors

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[Alliance 8.7 report](#) on “Ending child labour, forced labour and human trafficking in global supply chains,” published in November 2019.

Acronyms and abbreviations

ASM	Artisanal and small-scale mining
CBI	Centre for the Promotion of Imports from developing countries (the Netherlands)
EJF	Environmental Justice Foundation
FLA	Fair Labor Association
IFC	International Finance Corporation
ILO	International Labour Organization
ILPI	International Law and Policy Institute
LCD	Liquid crystal display
NGO	Non-governmental organization
UNICEF	United Nations Children’s Fund





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Child labour in global supply chains

Child labour and supply chain responsibility

Global brands and retailers have worked for decades to eliminate child labour from their supply chains, primarily through voluntary efforts sparked by notions of social contract, peer performance or reputation management. Companies' efforts may vary based on the size, geography and nature of their supply chain, as well as their

financial commitments to social responsibility and eliminating child labour. However, whether the company is a multibillion-dollar consumer products retailer or a small or medium-sized manufacturer, the focus of these efforts has largely been on Tier 1 supplier entities.

Tier 1

The so-called first tier (Tier 1) is the site where the final product ordered by a brand or retailer is manufactured, assembled or processed and is usually owned and operated by a contracted third party. For example, in the case of apparel, Tier 1 factories are where garments are cut and sewn or assembled for export. In the case of electronics,

Tier 1 factories complete the assembly of ready-for-market products. In agriculture, the Tier 1 may be the final point of fruit or vegetable packing or the site where food products are processed and packaged, such as canned goods, flash-frozen food or more complex food preparation in a food processing factory.

Companies' efforts over the last few decades have vastly reduced the presence of children working in the Tier 1 supply chain. However,

children remain present in the second, third and fourth tiers of the process, what is also known as the upstream supply chain.

The upstream supply chain

Unfortunately, the nature of work in the upstream supply chain can present even greater risks to the well-being and safety of working children. In the apparel, electronics, and food and agriculture supply chains, children working in upstream operations may carry out such labour activities as cotton planting and harvesting, mineral mining or food growing and harvesting.

Buyers traditionally have had less visibility into these areas of the supply chain and therefore have directed fewer resources to the identification and elimination of child labour in these tiers. In recent years, traceability efforts have helped to define a visual path into the upstream supply chain but these efforts may be constrained by

market realities, such as traders' and brokers' unwillingness to disclose their sources for fear of getting cut out of the value chain. Other challenges include seasonal changes in commodity sourcing partners, meaning that different farmers are in the supply chain year to year. In some countries, the government determines annually to whom farmers sell their crop, and those buyers, usually processors of some kind, are mandated to purchase from those farmers.

These challenges are explored further in this report, which provides examples of company and multi-stakeholder platform engagement with the upstream supply chain in ways that may be modelled to eliminate child labour and improve child rights.

Mapping the supply chain

The following supply chain maps for apparel, electronics, and food and agriculture provide further insight into the workings of these supply chains, along with a brief introduction to each sector.

APPAREL

An estimated 60 to 75 million people are involved in the worldwide production of textiles, garments and footwear.¹ Among these, millions are children performing illegal and hazardous work. While it has been known for decades that children are among those working in the apparel supply chain, the exact numbers are difficult to ascertain since their work is often hidden deep within the global supply chain, pushed to undisclosed subcontracted factory sites where they do informal work or home-based activities not easily visible to others.

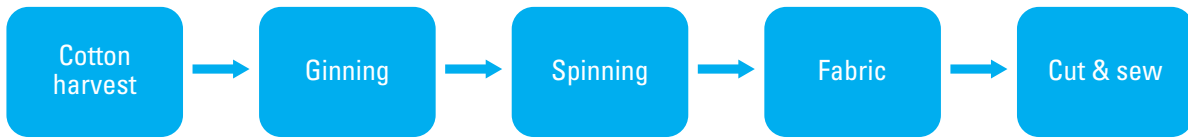
In fact, the complexity of the apparel supply chain can challenge linear or single-solution approaches to the elimination of child labour, such as Tier 1 factory auditing solutions. To understand why, consider the simplified apparel supply chain mapping of a cotton T-shirt (*see Figure 1*):

In reality, even to make a simple cotton T-shirt, the actual supply chain can be much more complex, as shown in the expanded flow chart (*see Figure 2*).

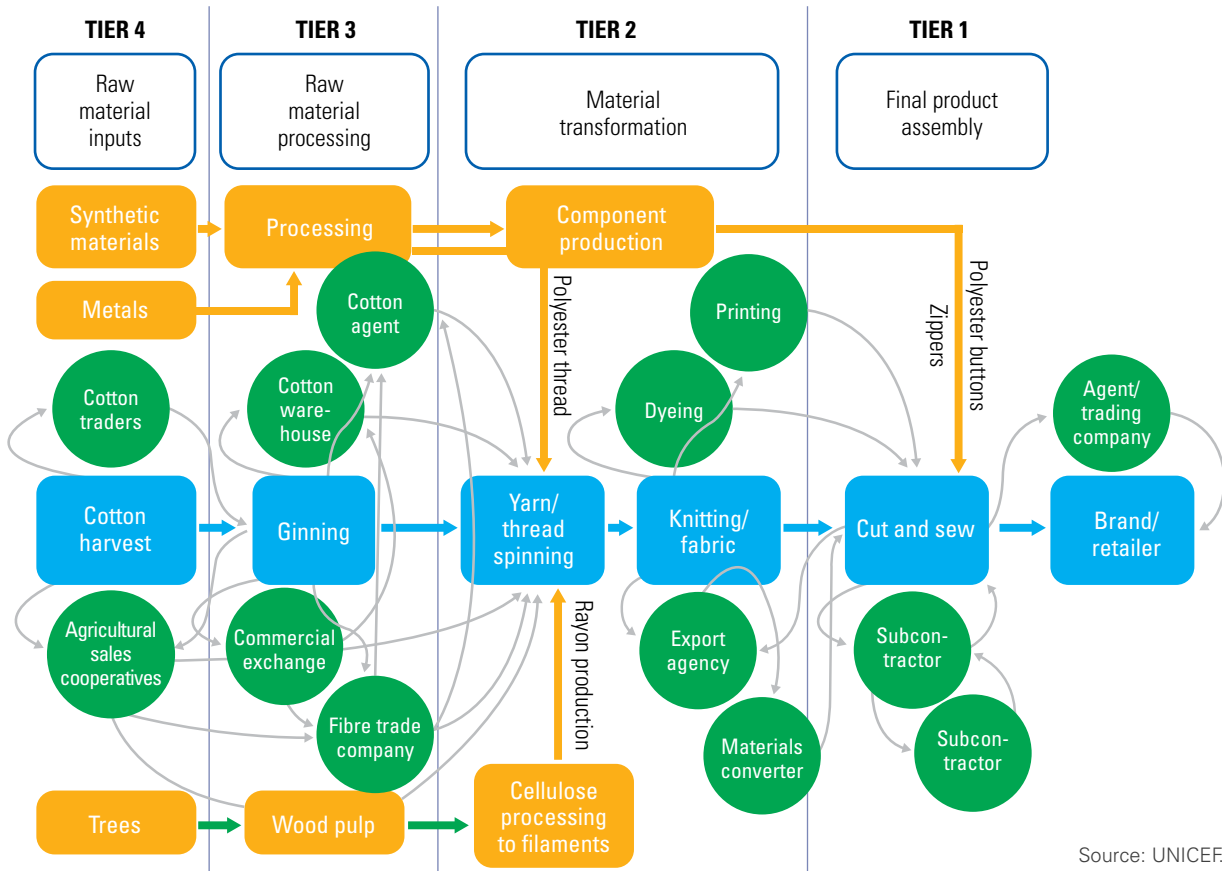
In Figure 2, the light green circles show the addition of traders, agents, processors and subcontractors that are part of the cotton apparel value chain shown in blue. The orange boxes indicate non-cotton materials or inputs that may be used in a variety of apparel production, including materials for producing polyester or rayon threads and fabrics and components such as buttons and zippers. The origin and input of wood pulp or metal or the compounds used to create ethylene for polyester production are not included in this chart but would add even greater complexity to the apparel product chain if illustrated here.

It becomes clear that if a brand or retailer focuses the bulk of its child labour elimination efforts on the Tier 1 depicted here, a vast amount of the supply chain does not benefit from such interventions, including possible omissions of undisclosed subcontractors at the Tier 1 level.

Similar conclusions can be drawn from a review of the electronics and food and agriculture supply chains.

Figure 1. Simplified apparel supply chain


Source: UNICEF.

Figure 2. Apparel supply chain


Source: UNICEF.

CASE STUDY
BANGLADESH APPAREL SUBCONTRACTING

In 2015, the NYU Stern School of Business published a study that aimed to map the garment industry in Bangladesh. While previously estimated to encompass 4,000 to 5,000 factories, the study concluded that more than 7,000 garment factories exist in the country, producing for export. The research determined that unacknowledged subcontractors are not represented in official tallies but constitute over one third of the garment factories identified, employing as many as 3 million workers. These undisclosed factories more often than not fall outside the Tier 1 auditing mechanisms and are not currently participants in industry-wide efforts to improve factory safety after the Rana Plaza collapse in 2013. (Rana Plaza itself housed an undisclosed subcontractor producing garments for major brands.) Among these subcontractors are informal factories that operate without registration. Workers here are among the most vulnerable in the industry.

ELECTRONICS

The electronics industry is one of the largest industrial sectors in the world. As the sector is comprised of many different product chains and activities, it is challenging to estimate the total number of workers involved. A Better Work estimate from 2010 puts the number of workers involved in the electronics industry at 18 million and growing.² Alongside the industrial manufacture of electronics sits the world of mineral mining, supplying raw material minerals and metals used in many electronics, such as gold, copper, cobalt, tantalum, tungsten and tin, among others. Many of

these minerals come from artisanal and small-scale mining (ASM) and are estimated to involve upward of 40.5 million people, including over 1 million children.³ The exact number of children involved in both the mining and industrial segments of the electronics supply chain is difficult to ascertain: mining work occurs far upstream and children are more frequently found in undisclosed subcontracted factory sites, informal work or home-based activities. All of these situations are characterized by minimal visibility from buyers and brands.

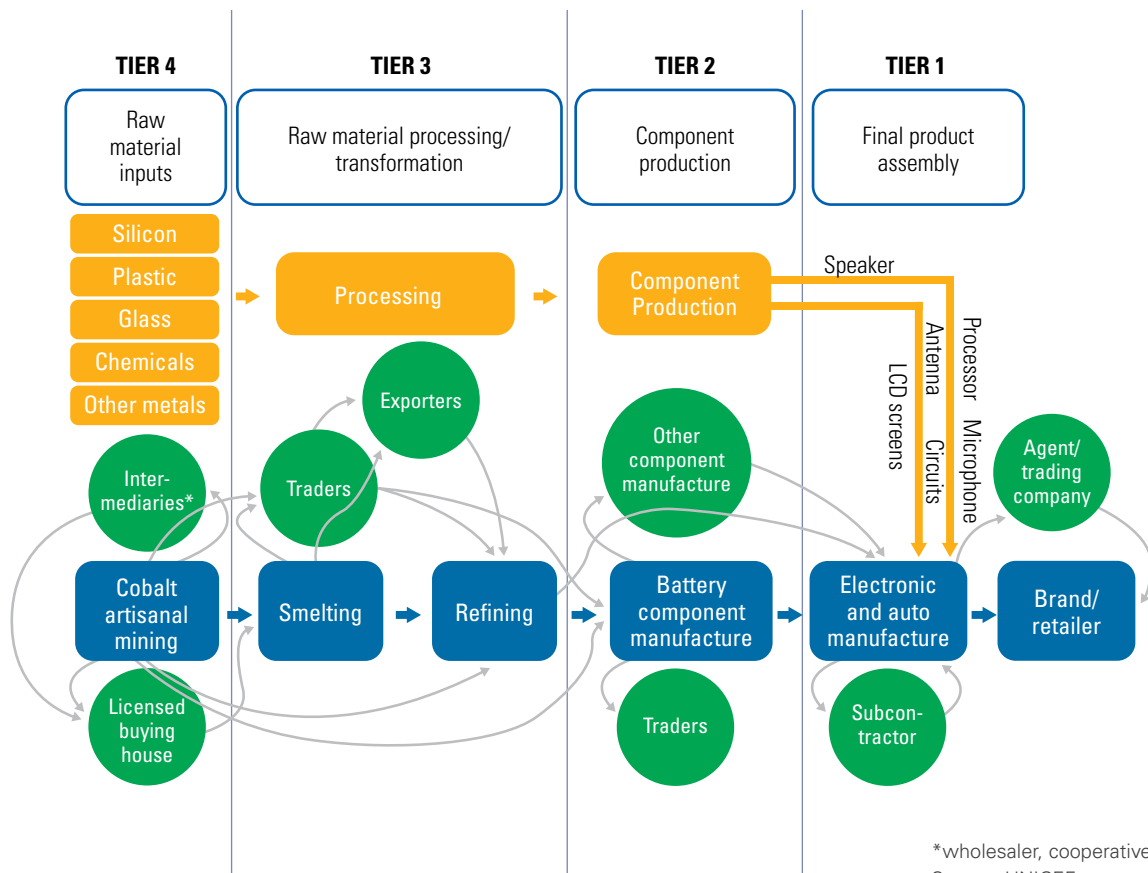
Figure 3 shows the simplified electronics supply chain mapping of a lithium battery for a smartphone.

Figure 3. Simplified electronics supply chain



Source: UNICEF.

Figure 4. Electronics supply chain



*wholesaler, cooperative, transporter
 Source: UNICEF.

The simplified map focuses on the use of the mineral cobalt in the manufacture of the lithium-ion battery. The more complex – but still greatly simplified – supply chain map in Figure 4 shows the introduction of other entities and processes involved in the creation of the end product.

The light green circles show intermediaries, buying houses, traders and exporters involved in the movement and processing of the mineral ore. The number of different players involved and the ways the mineral is transformed through processing contribute to the lack of transparency in the exact origin of the mineral, the specific region or even the mine where the ore originated. The orange boxes in the chart indicate additional raw materials that will be used to create other component parts that will form part of the final electronic product. In the case of a smartphone, that may include such parts as various circuits, processors, an LCD screen, microphone, speakers and other components. Each part may be manufactured by separate entities and arrive at an assembly plant to become part of the final product. The point of final assembly of many separately manufactured parts is typically the Tier 1 factory in the electronics supply chain.

Food and agriculture

Agriculture is the sector responsible for the largest amount of child labour worldwide.⁴ According to the International Labour Organization (ILO), more than 98 million children aged 5–17 years work in agriculture, including in farming, fishing, aquaculture, forestry and livestock. This accounts for approximately 60 per cent of child labourers in the world. Nearly 68 per cent of them are carrying out unpaid work for the family. However, the work may involve long work hours and dangerous conditions. The ILO reports that agriculture is one

of the three most dangerous sectors in terms of work-related fatalities, non-fatal accidents and occupational diseases.⁵

While the many food and agriculture supply chains are diverse, the example reviewed here is of the cocoa supply chain, where cocoa beans are harvested and processed into cocoa powder, liquor or butter and added to other ingredients to create food products such as chocolate candy bars. Figure 5 shows the simplified version of this supply chain.

The more complex version of this supply chain includes added light green circles showing the different entities involved in the processing of the harvested cocoa bean, including collectors, cooperatives, traders and exporters, before the bean is further processed and transformed for inclusion in other food products (*see Figure 6*). The orange boxes show additional raw materials that will feed into the chocolate production, including milk, sugar cane and soybean that will become ingredients such as sugar, milk fat and soy lecithin, added at the chocolate manufacturing stage.

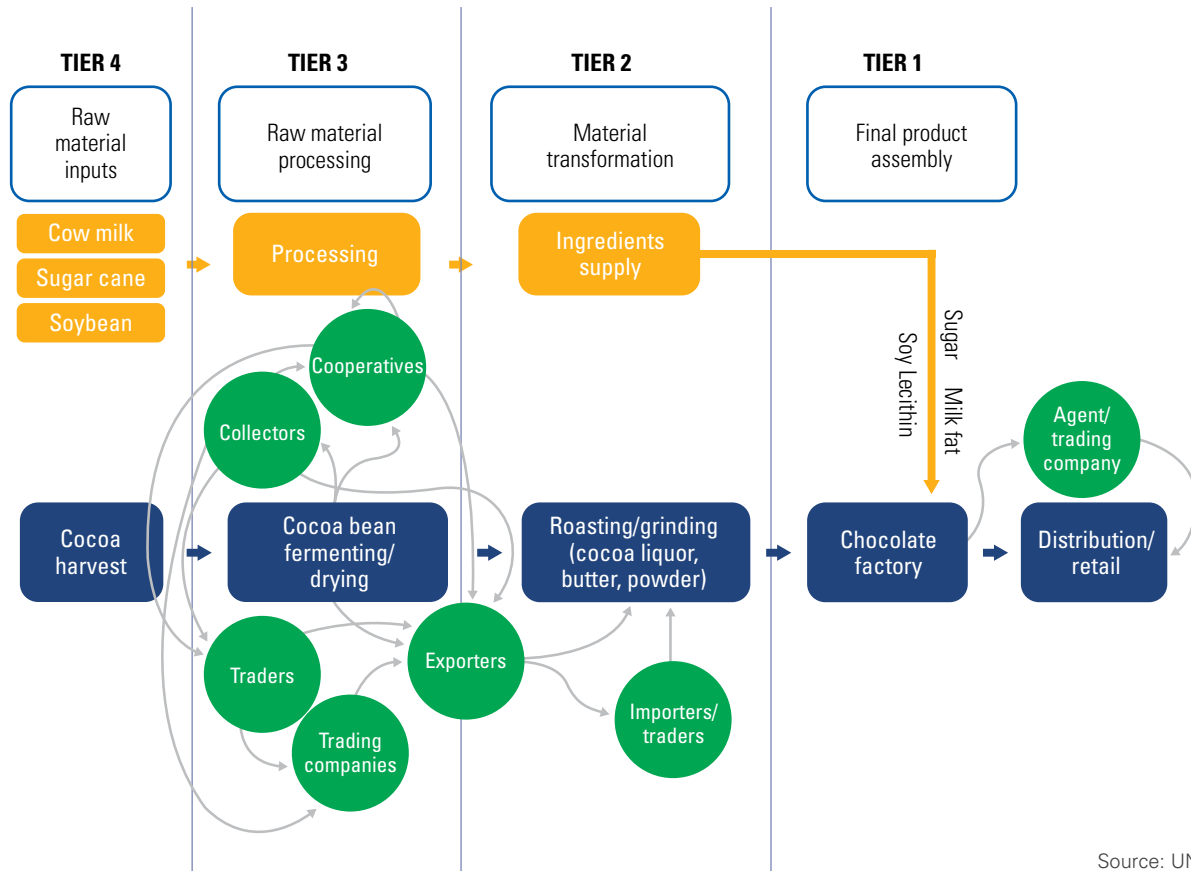
The next section of this report attempts to illustrate where in the upstream supply chain children are most often present and under what conditions they are working, to inform the discussion of how best to reach and influence those parts of the supply chain. The hypothetical supply chains explored will follow the simplified supply chain maps in order to focus on areas where children have been documented to be present.

In these examples, the supply chains will be examined from the raw material origin through to the finished product, in a downstream flow, from Tier 4 to Tier 1.

Figure 5. Simplified food and agriculture supply chain



Source: UNICEF.

Figure 6. Food and agriculture supply chain (cocoa)


Source: UNICEF.

Tier 4: Raw material input

At the start of most upstream supply chains are the raw materials collected to be used in or to create components and materials that contribute to the end consumer product. The apparel, electronics and agriculture industries each have a Tier 4 supply chain that is difficult to trace from the final product upstream to the source. Tier 4 can be characterized by informal work or work not as regulated as in other sectors; it often includes vulnerable populations, incorporating the most impoverished as well as child labourers. It often presents some of the most dangerous working conditions for children, including exposure to risks of workplace injury, fatalities, situations of trafficking, bonded labour, physical abuse and sexual abuse.

Apparel: Cotton harvest

India is the second largest producer of cotton in the world and is therefore a good example of a country of origin for this sample supply chain. Cotton production begins with the planting of cottonseed and continues with the cultivation of the crop followed by its harvest.

One study examining the role of child labour in the Indian cotton sector estimated that children carry out 90 per cent of the activities in Indian cottonseed, including seed sowing, watering and irrigation, weeding and fertilization, manual seed

pollination and harvesting.⁶ Rather than declining, the number of children working to produce cottonseed in India has grown by as much as 25 per cent over the last decade. In 2015, an

estimated 500,000 children were working in cottonseed cultivation, of which half were under the age of 14.⁷

Health and safety risks

Cotton cultivation and harvest work in any country will involve long hours in the sun, normally without adequate shade, rest or access to drinking water. These are the exact conditions under which children in India have been documented to work.

Children are involved in handling crops and crop care, including weeding and fertilization, which expose them to hazardous chemicals. The long work hours interfere with schooling and exceed limits set by national legislation.⁸

Bonded labour, trafficking and sexual abuse

A 2015 study found the majority of children working in Indian cotton are employed by companies, rather than in family farms. Growers pay an advance to parents to guarantee the children's labour commitment during the entire cotton season, creating the risk of bonded labour situations.⁹ The balance of any payment owed after the deduction of the advance will be paid to parents or other family members when possible, either at the end of the harvest or during, and children themselves are not paid directly for the work.¹⁰

Furthermore, children may be trafficked into labour. In the five top cotton producing states in India, approximately 31.8 per cent of workers are migrants, who live in housing provided by growers and face additional risk of abuse and exploitation.¹¹ Migrant children may be housed in camps, work long hours, from 5 a.m. to 6 p.m. or 7 p.m., and then be obligated to perform additional work in the employer's home as well.¹² Girls in such camps are subject to sexual exploitation, abuse and rape.¹³

Electronics: Cobalt mining

Cobalt is a critical ingredient in lithium battery manufacture. Two thirds of the world's cobalt production currently takes place in the Democratic Republic of the Congo, with this proportion expected to rise past 70 per cent by 2021.¹⁴

ASM accounted for 15 per cent of Congolese cobalt output in 2017.¹⁵ It is estimated that 13 per cent of the mining labour force living in the mining communities of the copper-cobalt belt are under 18 years of age. Of these, 51 per cent are children aged 15–17 years, 41 per cent are 10–14 years, and 8 per cent are under 10 years of age.¹⁶ A recent estimate puts the number at 35,000 children mining cobalt, some as young as 6 years old.¹⁷

Extreme risks to safety and well-being

Living or working in the mining areas exposes children to physical abuse, drug abuse, sexual exploitation and violence.¹⁸ Cobalt mining areas in the south of the Democratic Republic of the Congo are a draw for migrants fleeing traumatic violence and conflict in the northern provinces. Migration is often accompanied by prostitution, including that of young girls and boys in the mining communities. Orphans and children

fleeing conflict areas as unaccompanied minors are particularly vulnerable groups that may be attracted to quick cash in ASM, despite the risky environment. Artisanal miners may use drugs to steel themselves against the fear of entering into deep, unsupported shafts. Children may be exposed to drug use and even plied with drugs themselves. Children have reported being beaten or seeing other children beaten by security guards.

Health risks

Children may work sorting, washing, crushing and carrying cobalt.¹⁹ They do not receive or wear gloves or masks, yet the World Health Organization has warned that exposure to cobalt and breathing in its dust fumes can cause long-term health issues.²⁰ In addition, washing is often done in water laced with contaminants from

large-scale mining activity, including chemicals such as cyanide and concentrations of industrial uranium.²¹ The health impacts for women and children involved in washing activities include irritating skin conditions and reports of urinary tract infections. Pregnant women are at risk of birth defects.

Lack of access to schooling

Children reported having to work because their parents had no formal employment and could not afford school fees.²² Some children may combine work and schooling, which is usually a half day either in the morning or the afternoon. They may also accompany parents to work into the mining areas. Children who collect cobalt from tailings or salvage minerals from the washing areas may sell their cobalt to adult miners or small-scale traders who then take it to local licensed buying houses.²³

Agriculture: Cocoa harvest

Côte d'Ivoire is the largest producer of cocoa in the world with more than 40 per cent of global production and more than 800,000 smallholder farmers.²⁴

A 2013/14 study estimated that 1.15 million children in Côte d'Ivoire were engaged in hazardous work in the cocoa sector.²⁵ A 2018 study on the medium and high cocoa producing areas of Côte d'Ivoire found 891,500 children involved in cocoa agricultural work, of which 86 per cent were engaged in hazardous work.²⁶

Typical work for children can include cutting cocoa pods off trees with knives and machetes, gathering pods for transport and helping to transport pods to villages or collection points. Most cocoa farm work is reportedly performed by boys; one study found that 62.7 per cent of child labour in cocoa agriculture was conducted by boys, with an even distribution of ages: 33 per cent each in the categories of children aged 10–11 years, 12–14 years and 15–17 years.²⁷

Health and safety risks, injuries

Safety risks to child workers are present from the use of knives and machetes, exposure to snakes and chemicals, and injury from carrying loads. One study identified hazardous work activities reported by child workers to include using sharp tools, lifting

heavy loads, clearing land and using agrochemicals. Of the children involved in hazardous work, 79 per cent used sharp tools, 70 per cent carried heavy loads, 67 per cent cleared land, and just under 25 per cent used agrochemicals.²⁸

Migrants, trafficking, forced labour

The United States Department of Labor reports that children from neighbouring West African countries are trafficked into Côte d'Ivoire to work on cocoa farms.²⁹ In some cases, cocoa farmers

will travel to neighbouring countries to recruit children directly, paying families an advance to take their children to work on farms. Migrant children often are housed in remote villages in

poor living conditions. They usually do not have birth documents, leaving them vulnerable to exploitation.³⁰ A study by Anti-Slavery International found that only 9 of 133 young people from Burkina Faso and Mali that had worked in the Ivorian cocoa sector were paid according to prior

agreements and the rest were unpaid or paid very little.³¹ A Walk Free Foundation and Tulane University study estimated that approximately 2,000 children were victims of forced child labour, being obliged to work in cocoa agriculture by someone other than a parent.³²

CASE STUDY

RESPONSIBLE SOURCING IN THE TIER 4 SUPPLY CHAIN

In 2002, the furniture retail company IKEA embarked on a study of the global cotton industry to construct an effective strategy for cotton consumption, taking into account both social and environmental factors. It adopted a three-pronged approach to cotton sourcing: local, global and internal. In the local regions where it sourced cotton, IKEA partnered with development and conservation organizations active on the ground in target key cotton regions. Globally, it joined the Better Cotton Initiative, a platform focused on promoting sustainable sourcing and certifying good social and environmental practices. Internally, IKEA considered the market implications of exclusive organic sourcing and instead adopted a more flexible approach, working directly with farmers to improve practices that would meet its sustainability goals. By 2006, a team was in place to train and organize farmers in south India. The product line for the IKEA Home Textiles Division was broken down by supplier, then by yarn type and fineness. IKEA identified three of its biggest suppliers of fine yarn, covering 40 per cent of the division. Based on the target cotton cultivation regions, projects to work with farmers to improve their practices were launched. However, IKEA soon identified a challenge: ensuring that ginners bought cotton from the trained farmers proved difficult, as the ginners had no obvious incentive to alter their purchasing practices. After getting ginners on board, IKEA then got pushback from suppliers being asked to purchase from those ginners; some were hesitant to establish new business partnerships and incur additional costs from procuring cotton from further distances compared to their prior sourcing base. As a result, IKEA adapted its model. It collaborated with suppliers to identify their existing ginning partners and then worked with those ginners to motivate them to join the initiative. From that point, it was able to focus on additional aims of ensuring high demand for those ginners' cotton product and working to promote the volume and geographical spread of cotton available according to the company's desired social and environmental standards.³³

Tier 3: Raw material processing

At Tier 3, the raw material usually undergoes an initial processing phase. It may or may not involve a fundamental change to the material, but it is generally the moment where the upstream traceability back to the farms or mines is either lost or ensured. In some cases, this tier is considered the 'pinch point' in the supply chain, where groups of buyers may exercise influence over practices further upstream.

Apparel: Ginning

Cotton ginning almost always occurs within the same cotton growing country.³⁴ In India, children are prohibited by law from working in ginning and cotton processing. Despite this, children are known to be frequently involved in cotton ginning.³⁵ Children in ginning processes in India are usually working with a 'machine charkha' or raw cotton feeder machine, pushing cotton onto conveyor belts and overseeing machinery feeds. One study revealed 8 per cent of charkha workers were under 14 years of age.³⁶ Other ginning activities children are involved in include spreading cotton, moving cotton bales and removing cottonseed.³⁷

Long work hours, low pay

As with harvest work, children involved in cotton ginning processes are engaged in long work hours. One study found children working 12-hour shifts and receiving less than half the minimum wage. Children's wages went to a labour contractor who would settle accounts,

reportedly with the parents, at the end of the season. Yet one investigation revealed that a number of interviewed children did not know where their parents were. They had essentially been trafficked into bonded labour with no means of returning home.³⁸

Extreme risks to safety and well-being

Numerous severe injuries have been documented related to the work of children in ginning in India, including children losing hands in machinery accidents.³⁹ Also, the high level of exposure to cotton dust has been shown to contribute to lung disease.⁴⁰ Children who are illegally employed in hazardous ginning work may not receive or use necessary protective equipment from their employers. There have also been reports of children falling asleep from exhaustion and suffocating in the piles of raw cotton waiting to be processed.⁴¹

Electronics: (a) Smelting

In the cobalt supply chain, Tier 3 can be represented by the smelting and refining processes that take place both in the country of mineral origin and in an importing country. In the Democratic Republic of the Congo, once local traders have purchased cobalt from miners, including from adults selling on behalf of children or from other traders who purchased from children, they sell to licensed buying houses who then sell to larger companies that operate smelters and export the processed ore.⁴² Local smelters in the Democratic Republic of the

Congo process low-grade cobalt into crude cobalt hydroxide before shipping it, often via Durban in South Africa, to China.⁴³

Electronics: (b) Refining

Refineries in China further process the cobalt into a range of chemical products.⁴⁴ China produces as much as 80 per cent of the processed cobalt mineral used in lithium-ion batteries.⁴⁵ No reports indicated the presence or involvement of children in this stage of the supply chain in China. This may be due to the greater complexity of work involved in smelting and refining, something not as easily carried out by children.

Agriculture: Cocoa bean fermenting/drying

Once cocoa pods have been removed from trees, they are opened to remove the cocoa beans and pulp, and then undergo a fermentation and drying process to prepare them for sale on the cocoa trading market.

Dangerous work, heavy loads

Children may be engaged in this work, using knives and machetes to cut the pods open and scoop the contents out into baskets. The baskets are then carried to a fermentation area, where the beans are placed on banana leaves and left to ferment. Children may help to prepare the fermentation area,

which involves digging shallow pits and cutting banana leaves and stalks to line the pits. Normally an adult manages the fermentation and drying process, as it influences the quality of the beans, though children may assist as well. This involves turning the beans and keeping them covered.

When the beans are ready to go to market, children may assist in bagging the beans and carrying the loaded bags. The bags may be

transported by truck to buying centres or sold to a local collector or cooperative.

CASE STUDY

BROKER RESPONSIBILITY IN TIER 3

It is increasingly apparent that traders play an important role in instituting responsible practices in commodity supply chains, whether in regard to human rights, product integrity or overall compliance. The Institute for Human Rights and Business has published guidance for the commodity trading sector on implementing the United Nations Guiding Principles on Business and Human Rights in an effort to leverage the sector's influence on human rights in commodity supply chains. Broker engagement is newly developing as a solution for upstream supply chain practices but already good practices are emerging for further study.

Trafigura, a commodities trader, is taking a visible role in upstream supply chain responsibility by attempting to formalize cobalt artisanal mining in the Democratic Republic of the Congo. Focusing on one artisanal mining site at present, Trafigura will work with the mine operator and a local non-governmental organization to secure the site to prevent access by children, to supervise miners and to offer safety equipment to miners, among other activities. While shutting children out of the mining site reduces or eliminates access to that site, it does not ensure that children are not displaced into other mining sites or guarantee that they are ultimately connected to school and other support services. However, the visibility of the trader in this ecosystem is an important step forward in bringing upstream parties into the conversation about supply chain responsibility and about both the reduction of child labour and the promotion of child protection.

Tier 2: Material transformation

Tier 2 generally involves another significant transformation of the raw material or an introduction of the material into a stage of component manufacture. The companies carrying out these processes are usually suppliers to the Tier 1 company and may be useful in identifying entities further upstream.

Apparel: (a) Spinning

Once cotton fibre has been processed, it can be made into yarn or thread through the spinning process. The Indian state of Tamil Nadu is the country's main hub of cotton yarn production, accounting for over 65 per cent of the total number of spinning units in India.⁴⁶

This region of India is known for the Sumangali employment scheme. Sumangali means 'happily married bride' in Tamil and reflects the aspiration that young women from rural areas could come to Tamil Nadu and work for a 3–5 year period to earn money to pay a bridal dowry, a practice that was made illegal in India in 1961. Over 80 per cent of the incidents of the Sumangali scheme identified in the region were found to be within spinning mills.⁴⁷

The Sumangali scheme has been the subject of numerous studies over the last decade, as the issue began to garner global headlines. Some reports indicate that young female workers appeared to be 12–14 years of age.⁴⁸ A survey of 1,638 spinning mill workers found that 18 per cent were under 15 years of age when they entered the employment relationship.⁴⁹

Poor living conditions, restricted freedoms and sexual harassment

The young workers have been found in many cases to live and work in poor conditions, in factory-owned hostels where they have little or no freedom of movement or privacy. Forced overtime, exhaustion and insufficient sleep from long hours have been reported, as well as injuries

on the job. For some workers, payment is handed over directly to parents rather than to them and the promised lump sum payment at the end of the multi-year contract is not always paid.⁵⁰ Sexual advances and harassment from supervisors have also been reported in the workplace.

Health and safety risks, fatal accidents

Accounts are given of unsafe working conditions, ingestion of cotton in the lungs and stomach and respiratory problems, all of which may lead to long-term illness or death, as well as fatal workplace accidents, including a fatal incident involving trauma to the head. Work-related illnesses identified during the research include chronic pain in hands and legs, tuberculosis, asthma, bronchitis, severe headaches, and more.⁵¹

Apparel: (b) Fabric

Weaving or knitting processes are used to produce fabric from yarn. Tamil Nadu produces about 7 per cent of cotton cloth in India and the city of Tirupur is a major knit production centre.⁵²

Informal employment, no benefits

A study focused on Tirupur found child labourers to be involved in virtually all processes related to knitting production, frequently acting as a helper for an adult worker. These children are typically employed informally and paid on a daily or piece-

rate basis. Informal employment ensures children are not easily visible; they are not registered in national benefit programmes and no records of employment or payment are maintained.⁵³

Wage advances, bonded labour

As with a majority of workers in the industry, most of the children employed in knitting have migrated to the region with their families to pursue economic opportunity. Some parents report

needing the children's income for survival. Parents may take wage advances when the children begin to work or during their employment. In some cases, this is to pay down family debt.⁵⁴

Long work hours, abusive conditions

Child workers are paid less than adults and less than the legal minimum wage. They often work from 8 a.m. to 9 p.m. daily, and may have

overnight shifts until 2 a.m. Children reported regular verbal and physical abuse from their supervisors.⁵⁵

Electronics: Component manufacture

China produces a majority of electronic components used in final product assembly in China factories. These factories usually sell their

product as a supplier to the Tier 1 manufacturer. There has been much less focus on these component suppliers compared with the Tier 1 manufacturers but a handful of media reports and civil society studies have surfaced, providing insight into conditions and practices within Tier 2.

Long work hours, lack of contracts and safety training

A China-based mobile phone case assembly factory selling product to Samsung was found to have employed a group of children aged 14–15 years. The children were said to have been recruited by a labour broker using false identification. The children worked 11 hours per day, including night shifts, without a labour contract or any safety training.⁵⁶ Following a media exposé, Chinese authorities spoke with the

children and they were released.⁵⁷ Samsung stated that the labour broker had contributed to the children's future education costs.

Samsung said it would reduce its 2014 orders from the factory by 30 per cent “to hold the supplier responsible for failing to monitor its subcontractors, in accordance with Samsung's zero tolerance policy on child labor”.⁵⁸

Forced student labour, illegal deposits

Recent non-governmental organization (NGO) research identified electronic keyboard component makers using student labour to assemble the keyboards. Students reported that the schools forced them to go to the factory under threat of withholding their graduation certificate. Interns worked 12-hour days for months at a time without a day off. Students were also hired illegally through recruitment agencies and paid illegal deposits to the recruitment agencies or their own universities to ‘secure’ the internship.⁵⁹

Agriculture: Roasting/grinding

The Netherlands is the main importer of cocoa beans worldwide and the second-largest cocoa grinder. The country imports approximately 85 per cent of its cocoa beans from West Africa, primarily in the form of bulk cocoa.⁶⁰

Cocoa beans from Côte d'Ivoire arrive at the Port of Amsterdam and then move to the grinding installations of some of the world's largest multinational grinders. They are transformed into either cocoa liquor, cocoa butter or cocoa powder. No reports identified the involvement of children in grinding either in Côte d'Ivoire or in the Netherlands.

Tier 1: Final product assembly

The Tier 1 factory or supplier is normally contracted by the buyer directly or through a vendor or buying agent. This supplier is the most visible in the supply chain and generally has a purchasing contract with the brand buyer or agent that can include provisions on child labour and overall business conduct. This is the tier in which brands can exert the most leverage and therefore have traditionally invested more resources into monitoring conditions.

Apparel: Cut and sew

The final stop in this apparel supply chain is the Tier 1 factory that will cut and sew fabric into branded apparel. Bangladesh is the second largest garment supplier in the world, after China,⁶¹ and is the top importer of cotton and cotton products from India.

While Bangladesh is said to have had relative success in eliminating child labour in export-oriented garment factories, it remains a concern for domestic production and the unauthorized subcontractors that link to the supply chain of international brands.⁶²

11–12-year-olds working in the garment sector

In a survey carried out in Bangladeshi slums, children reported starting work at 11 or 12 years of age. Almost two thirds (62 per cent) of girls reported working in the garment sector, 10 per cent in informal sewing or handicrafts; 13 per

cent of boys reported working in the garment sector, 8 per cent in sewing or handicrafts.⁶³ Children are typically involved in embroidery, cutting, trimming and button stitching, among other tasks.

Long work hours, fatigue, no schooling

The survey found that 15 per cent of children aged 6–14 years do not go to school and work an average of 64 hours each week. Approximately 35 per cent of children reported extreme fatigue on the job. Some families preferred schooling

for their children but felt they could not survive without the additional income.⁶⁴ Yet children working in the garment sector are paid just over half the legal minimum wage, when adjusted for actual work hours.⁶⁵

Health and safety risks

While safety is monitored at export factories, a mapping project revealed that only half of garment factories are direct suppliers to brands. The other half may include indirect suppliers (subcontractors) and informal factories. Informal factories have virtually no safety systems and are not subject to external monitoring, such that workers there function in more precarious safety conditions than in registered export factories.⁶⁶

Electronics: Product manufacture

China is the top manufacturer and exporter of consumer electronics in the world. Tier 1 electronic suppliers in China assemble phones, computers, televisions, cameras, etc., for brand name retailers.

Some high-profile exposés have circulated around the use of student workers in Chinese electronics factories. The use of students in forced labour internships at phone assembly factories in China was first reported in 2012, related to a smartphone supplier.⁶⁷ Such student internships

were found to be in violation of vocational training laws and unrelated to the students' field of study. Students faced the threat of not graduating if they attempted to leave. One smartphone supplier, Foxconn, was reportedly using 150,000 interns in 2012, representing 15 per cent of its workforce.⁶⁸

Illegal and excessive overtime hours, lack of benefits and bonus pay

A study of the student intern practices in China found a sample group of interns who were 16.5 years old on average. The interns reported standing for more than 10 hours per day and manning production lines, engaged in production work completely unrelated to their fields of study.⁶⁹

Similarly, Foxconn students were reported to work long hours, in violation of restrictions on vocational training hours, were often not paid production bonuses that regular workers could earn, and did not receive social insurance.⁷⁰

Coercion to keep working

Internships were often extended to meet production needs, ranging from three months to a full year.⁷¹ Refusal to work or the desire to leave early could result in not graduating from school.⁷² More recently, a 2017 investigative report indicated these practices continued at Foxconn, with students reporting illegal overtime while being forced by their school to do the internship.⁷³

The cocoa powder arrives via truck transport to the Tier 1 manufacturing plant, where it is combined with other ingredients to create a chocolate candy bar. No reports communicated the involvement of children in the manufacture of chocolate bars in the United Kingdom or at any major brand candy makers at the Tier 1 level. Therefore, while the Tier 1 chocolate bar manufacturer shows no evidence of child labour, the Tier 4 raw material level of cocoa has become world renown for the involvement of children in hazardous work.

Agriculture: Chocolate making

Once cocoa has been transformed into cocoa liquor, butter or powder, it goes to a Tier 1 processor to produce the final product. In the case of chocolate bars, some of Europe's most popular bars are produced in the United Kingdom using cocoa powder processed in the Netherlands.

Tier 4 to Tier 1: Top risks for children

TIER 4	FORCED OR BONDED LABOUR/TRAFFICKING	EXPOSURE TO PHYSICAL, SEXUAL ABUSE	HEALTH AND SAFETY RISKS
COTTON HARVEST	Wage advances paid to parents create the obligation to work.	Migrants living in camps may be exposed to abuse.	Lack of shade, rest and water; exposure to pesticide; long work hours.
COBALT MINING	Migrant or orphaned children may be at risk.	Mining areas bring exposure to physical, sexual abuse.	Long-term health problems from mineral exposure.
COCOA HARVEST	Migrant children may be unpaid or paid little.	Migrants children may be subjected to abuse.	Injury from machetes, heavy loads; exposure to pesticide.
TIER 3	FORCED OR BONDED LABOUR/TRAFFICKING	EXPOSURE TO PHYSICAL, SEXUAL ABUSE	HEALTH AND SAFETY RISKS
COTTON GINNING	Children may be trafficked into labour; parents instead of children may receive wages directly.	Children staying in workhouses or dormitories may be exposed to abuse.	Machinery accidents involving lost limbs; lung disease due to cotton dust exposure; suffocation from exhaustion and falling asleep in piles of cotton.
COBALT SMELTING/REFINING	-	-	-
COCOA BEAN DRYING/ FERMENTING	Migrant children may be unpaid or paid little.	Migrant children may be subjected to abuse.	Injury from machetes, heavy loads.
TIER 2	FORCED OR BONDED LABOUR/TRAFFICKING	EXPOSURE TO PHYSICAL, SEXUAL ABUSE	HEALTH AND SAFETY RISKS
YARN SPINNING/FABRIC	Children may be forced to work overtime, with restricted movement. Payment may go to the parents and not the workers. Children earn less than legal wages and work overnight shifts.	Children may experience sexual advances and harassment from supervisors, or verbal and physical abuse.	Respiratory problems and related illness due to cotton fibre exposure; fatal workplace accidents.
ELECTRONIC COMPONENT MANUFACTURE	Children may be forced to work overtime and night shifts, with no rest days. Illegal deposits are paid to secure a job.	Not reported.	No safety training.
COCOA BEAN ROASTING/GRINDING	-	-	-
TIER 1	FORCED OR BONDED LABOUR/TRAFFICKING	EXPOSURE TO PHYSICAL, SEXUAL ABUSE	HEALTH AND SAFETY RISKS
APPAREL CUT AND SEW	Children may work long hours and be paid half the minimum wage.	-	Lack of safety systems in factories.
ELECTRONIC PRODUCT MANUFACTURE	Students are forced into internships with the risk of not graduating from school if they do not work.	-	Standing for 10 hours per day.
CHOCOLATE MAKING	-	-	-

Note: - = No information available. Source: UNICEF.

The Tier 4 to Tier 1 table illustrates some key risk areas for children working throughout the supply chain, from the Tier 4 processes at the beginning of a supply chain, downstream to the final production of products in Tier 1.

While many corporate resources are focused on monitoring labour practices, including child labour at the Tier 1 level, it is apparent that considerable risks to children lie further upstream.

Child labour: Supply, demand and response

The specific manifestations of child labour in each of these sectors and tiers of the supply chain may vary but they have a number of drivers in

common, fueled by local social, economic and cultural conditions.

Supply and demand factors

Poverty is often the primary driver of child labour, in tandem with other factors, such as the social acceptance of child labour, the perceived unimportance of education, the lack of access to

schools or teachers, or both, etc. The following section briefly explores some of the specific issues in the sectors and countries reviewed in this report at the Tier 4 level.

Cotton, India

In the cotton sector in India, hybrid seed production is a labour intensive activity, requiring hand pollination of the crop. Farmers hire children, especially girls, to pay them less than adult workers and to ensure a more obedient workforce believed to have more agile hands for the delicate cross-pollination work.⁷⁴ Children's labour is secured by wage advances to parents, creating a bond for their labour. These loans are often extended to families during the summer, when families face financial pressures related to seasonal drought and are most in need.

While there is a market need for labour, it is poverty in the households that creates the supply

of children available to enter this labour market. The context varies from state to state within India, but in some communities tapped for cottonseed labour, the families are of a lower caste and subject to discrimination. They may have low levels of literacy and education themselves, and not perceive the value of keeping a child in school compared to having additional income to support the household. In fact, the majority of child workers in cottonseed production no longer attend school at all. While they may start out by combining work and school, studies have shown they eventually drop out of school to keep working and to meet the terms of the wage advance paid to the parents.⁷⁵

Cobalt, Democratic Republic of the Congo

Many children become involved in cobalt ASM in the Democratic Republic of the Congo to supplement household income. The work is mostly unorganized and informal, meaning that most anyone can become involved in ASM work and children may accompany parents to the mine site to work. Even where the Ministry of Mines has designated a mining site as an ASM zone,

children reportedly may bribe security guards with 3,000–5,000 Congolese francs (US\$2–3) to access the sites.

The Democratic Republic of the Congo offers half-day schooling, usually a morning or afternoon session that lasts four hours. Children may work in ASM before or after school to earn extra

money or to accompany parents to work due to a lack of other activities. For example, virtually no recreation areas exist in Kolwezi, a primary cobalt mining area in the southern part of the Democratic Republic of the Congo.

In addition, although all schooling should be free according to the constitution of the Democratic

Republic of the Congo, children are required to pay school fees for both public and private education, to cover teacher salaries and other school needs, as well as costs associated with uniforms, supplies, etc. The lack of family funds to pay for schooling can be a barrier for children to access education and can prompt them to seek income opportunities instead.

Cocoa, Côte d'Ivoire

Poverty is also a pervasive challenge for cocoa growing communities in Côte d'Ivoire, where households rely on cocoa for over 85 per cent of income. In tandem with high demands for labour for cocoa work, children become involved either to work on a family farm or work alongside parents, or because they have migrated for work or been trafficked into forced labour.⁷⁶ The low income of farmers makes it difficult to hire labour to help with cocoa agriculture and therefore children are often involved in the work instead.

Barriers to schooling, such as the inability to pay school fees, can also motivate parents to take children to work with them. Schools can be difficult to reach in rural areas and may lack adequate staffing or supplies to support student populations. The lack of birth certificates can impair access to secondary schooling, where they are required for registration, and to other basic services, such as health care.⁷⁷ These conditions may cause education to be undervalued within a household or a community, with more focus on the benefits of children learning to farm and work as a means to acquire skills for the future.

Efforts on the ground

While it may be challenging for companies to trace their supply chains to specific entities, whether individual farms or mines, at the Tier 4 level, some may strive to address core issues in a sector and influence child labour practices in farming or mining communities that are represented in their supply chain.

Some companies may launch private efforts aimed at their own supply chain. Others may seek to collaborate via a private-sector initiative. Government and civil society initiatives may also

be involved and the extent to which all of these efforts interact varies widely.

A few examples of past and current initiatives to reduce child labour in the countries and sectors examined in this report follow. It should be noted that the aim here is not to examine the effectiveness of these efforts, as sufficient information may not be available on some of these programmes to make accurate conclusions about what has worked.

Cotton, India

Private sector: Various cottonseed companies have engaged in child labour monitoring programmes in their supply chains in an effort to reduce child labour. For example, Bayer instituted its Child Care Program in five states in India where the company has contract seed production with supplier farmers. The programme includes sensitizing communities to the consequences of child labour, implementing an

ongoing monitoring programme at supplier farms, and providing incentives for farmers who meet the child-labour ban throughout the full season. The programme also includes a focus on putting kids back to schools.⁷⁸

Civil society: MV Foundation, an NGO based in the state of Telangana, India, has worked for over

two decades to remove children from work and ensure their successful integration into schooling. Its work has included a focus on regions known for child labour in cottonseed, and collaboration with the Indian Association of Seed Industry to pressure seed companies into addressing child labour in supplier farms. MV Foundation's approach is to engage the entire community in an effort to influence social aims and ensure success in retaining children in school while replacing child workers with adult workers in cottonseed farms. This includes engaging parents, teachers, farmers,

community organizations, village leaders and the children themselves in a community-based approach. It has carried out this work in thousands of villages across India with hundreds of villages confirmed as 'child labour free zones'.⁷⁹

Also, due to the high-profile coverage of child labour in cottonseed, certain State Governments tried to shut down child trafficking routes, using border checkpoints during cottonseed planting time to attempt to prevent the influx of trafficked child workers.

Cobalt, Democratic Republic of the Congo

Private sector: The private-sector response to child labour in artisanal cobalt mining has primarily focused on trying to prevent artisanal cobalt from entering the supply chain altogether, or working to formalize artisanal mine sites, making the mining activity more responsible (child-free, with improved safety conditions) and traceable, ensuring companies can purchase from artisanal mines without child labour involved. Current dialogues do not seem to have focused as much on the specific remediation of child labour, including connecting child workers to services and education. However, the overall aim of programmes engaging with Congolese artisan-mined cobalt is to ensure ongoing benefits to artisanal miners by improving working conditions and income, rather than to have buyers cut them out of the supply chain completely to avoid the issues altogether.

Fairphone is a Dutch company that makes a smartphone with a positive impact on the value chain, both socially and environmentally. It aims for transparent supply chains that improve practices on the ground, including at the Tier 4 raw material level. For cobalt, the company has aligned with

the Better Cobalt programme, aiming to pilot the formalization of four artisanal mine sites in the Democratic Republic of the Congo with responsible practices. Fairphone hopes these efforts translate to the spread of responsible mining practices in the country and improved economic development.⁸⁰

Civil society: A range of civil society organizations are actively working with children in cobalt communities. Bon Pasteur Kolwezi, the Good Shepherd Sisters' operation based in the Democratic Republic of the Congo, has implemented a model of 'radical inclusivity' to address household poverty and child protection in the ASM communities. Bon Pasteur recruits children from the mine sites to attend a free school, built and staffed by Bon Pasteur and families in the community. The entire household is part of the intervention, with a focus on skills training for adults in the household, especially women, as a means to increase income and reduce incentives for children to return to mining. Vocational training includes a focus on farming and animal husbandry, skills that have largely disappeared in the region due to an extended and pervasive reliance on mining incomes.⁸¹

Cocoa, Côte d'Ivoire

Private sector: Large chocolate companies such as Mars, Mondelez and Nestlé have been working to address child labour in cocoa for nearly two decades, following passage of US legislation seeking to bring the practice to an end. These companies tend to run parallel programmes to remove children from cocoa agriculture and

most of them share common elements around child labour reduction, farmer productivity and community development. For example, the Mondelez programme known as Cocoa Life focuses on a community-based approach that includes child labour remediation and youth development, farmer income improvement,

community action planning, enhanced livelihoods involving community resilience and access to finance, and the conservation and restoration of forests. The programme features a Child Labour Monitoring and Remediation System that emphasizes sensitizing communities to child labour, identifying at-risk children, and working with local NGOs and government to remediate cases of child labour. These operate in 'Cocoa Life communities', understood to be villages targeted for programming based on their relationship to the Mondelez supply chain.⁸²

An attempt was made in 2014 to align these disparate corporate programmes under one umbrella, CocoaAction, to ensure the greater coordination of efforts and better alignment with government.

However, no updates have been provided on the initiative since the 2016 Annual Report.

Government: The Conseil Café Cacao is a governmental board in Côte d'Ivoire responsible for managing activities in cocoa and coffee. Its mandate includes fighting against the worst forms of child labour via participation in the country's National Action Plan to combat child labour. The board also convenes the Private-Public Partnership Platform to facilitate dialogue with private-sector actors working on child labour in cocoa. Also in existence is the National Monitoring Committee of Action to Combat Child Trafficking, Exploitation and Labour that authored the National Action Plan and instituted a nationwide, community-based child labour monitoring system.

Challenges and innovations

Challenges of traditional responses to child labour in supply chains

When companies have attempted to address child labour in their supply chain, the traditional response has been to look at the issues closest at hand. This is typically the Tier 1 supply chain, where the link between the buyer and supplier is clear and direct, where responsibility for labour practices seems more defined, and where contractual relationships can help to provide leverage to influence and change practices in accordance with buyer expectations or standards. However, as illustrated in this report, the Tier 1 supply chain is usually not where the greatest risk to children exists within a company's entire supply chain. Therefore, companies need to

consider how to affect the greatest risks to children where they currently exist, rather than where it is most convenient to act.

The need to look more deeply into Tiers 2, 3 and 4 of the supply chain may present unique challenges to the traditional responses to child labour in supply chains. For example, identifying the specific supply chain actors may be difficult, finding leverage to influence and change current practices that lead to child labour may be challenging, and applying the same toolkit used for Tier 1 actors, such as audit cycles and corrective action plans, may be less effective.

Identifying supply chain actors beyond Tier 1

Identifying Tier 1 supply chain manufacturers or suppliers often involves gathering information from vendors or agents involved in supplying the product. This can be a small hurdle but a reasonably manageable one. Once a company looks beyond Tier 1, to the suppliers of component parts and raw materials upstream in the supply chain, the layers of traders, agents, buyers and suppliers can begin to feel impenetrable.

More and more companies are undertaking efforts to ensure the traceability of their products. Traceability is “the ability to identify and trace the history, distribution, location and application of products, parts and materials, to ensure the reliability of sustainability claims, in the areas of human rights, labour (including health and safety), the environment and anti-corruption”.⁸³ Companies have undertaken traceability efforts in supply chains involving organic cotton, conflict minerals, Fairtrade cocoa, sustainable wood, food safety including mad cow disease, and more. There are various methodologies for tracing material inputs in a supply chain, such as labelling and segregating these materials throughout the transformative production processes, allowing their origin to be tracked through their entry into each new tier of the supply chain. However, the process is not always straightforward.

Challenges to traceability include the unwillingness of upstream actors to disclose their business relationships with brands and buyers further down the chain that they do not always recognize as a client or stakeholder. It is common for middlemen in the supply chain to guard their supply sources for fear of being cut out of the business relationship. However, these concerns could be addressed through non-disclosure agreements or other types of contractual commitments, or simply by relying on the relationship with the entity that buys from them. Each participant in the supply chain becomes an important player in unlocking access into the next tier of the chain.

For example, some outdoor apparel companies working on goose down traceability in their respective supply chains relied on their US-based down suppliers to open the doors to access information on European and Asian down processors providing raw material to those US suppliers. By convening the Outdoor Industry Association’s Down Task Force, brands and suppliers were able to work together on setting expectations for down traceability and communicating those expectations to the next tier of the chain. Having the US down supplier present and participating in discussions with upstream material suppliers helped open doors and increase transparency for the brands.

Influencing practices in the upstream supply chain

Identifying supply chain actors in Tiers 2, 3 and 4 is an important step but influencing practices is another challenge in itself. Each commodity or product supply chain is unique and the means for influencing practices along the various tiers may differ in effectiveness.

In the minerals supply chain, a model from the electronics industry exists, developed in response to US conflict minerals legislation. Some leading electronics brands confirmed that minerals such as tin, tantalum, tungsten and gold originated from thousands of mines in dozens of countries around the world and entered their supply chains through opaque trading channels. However, after mapping their specific supply

chains, they learned that the smelters worldwide that process these minerals only number several hundred. By placing emphasis on this ‘pinch point’, the industry could bring about change within this small group of actors, the smelters, helping to ensure mineral traceability upstream to the mines of origin.

Even in the Congolese artisanal cobalt supply chain, both brands and the media have placed the onus on the Chinese smelter operating in the Democratic Republic of the Congo to implement change pertaining to child labour in the artisanal mine sites. This itself is indicative of a key concept in influencing change: collaborative approaches. In many successful upstream supply

chain examples, companies are not acting alone but within the framework of a multi-stakeholder platform or an industry-wide initiative. As seen

with the CocoaAction platform, aligning company efforts to wield greater influence within a given sector or community is needed.

Re-examining the audit toolkit

While much discussion over whether audits are effective in changing labour practices at the Tier 1 level continues, also worth considering is whether audits are an effective mechanism for the upstream supply chain. Where traceability is concerned, audits have been used to ensure that properly documented processes are in place for the movement of materials from one tier to the next, setting a precedent for their application in the upstream supply chain. However, for sectors with widespread child labour, such as those examined in this report, namely cotton, cocoa and cobalt, it may not be practical to audit more than a sample of farms or mine sites within any given supply chain. Audits may provide data on current conditions that are useful for formulating action plans at the sector or community level, but may be less effective at influencing the child

labour practices within a community if taken one site at a time, especially where raw materials originate from smallholder farms, and tens of thousands of Tier 4 smallholder farms may supply to a single Tier 3 material processor. Therefore, the application of audits may not be a primary intervention to use in the upstream supply chain.

Also, outcomes where the focus of child labour interventions is a specific region or community will have a greater chance of being sustained if community members are engaged in the process, as noted in the following sections. Therefore, while an audit may provide useful data or insight, looking beyond an audit for engagement that can have the needed effects on child labour, child protection and the community as a whole is necessary.

Considering the constraints of other child labour interventions

The range of challenges with child-labour-focused interventions, beyond the issue of identifying the unique Tier 4 supply chain of a single company, is wide. Even a focus within a child labour monitoring programme on eliminating child labour in one company's supply chain can serve to displace children from one farm or mine site to another, moving the problem rather than addressing it. For example, a campaign to prevent children entering a specific group of farms may move them to other farms not participating in the campaign, or not in the same supply chain. Also, efforts to ensure a select group of farms are free from child labour, such as specific cocoa cooperatives in Côte d'Ivoire, can omit vast numbers of children from targeted programming. In the case of Côte d'Ivoire, as many as 60–70 per cent of participants in cocoa agriculture are not reached through the child labour monitoring programmes of large multinationals because they operate through informal traders rather than through organized cooperatives present in the supply chains of the large chocolate brands.⁸⁴

Similarly, a focus on child labour in one sector within a geographic region, such as the cotton farms of a specific community, may displace children from that sector into another, such as brick making work. In many cases, the displacement to a new sector creates even riskier or more hazardous conditions for children.

In both of these scenarios, children are not removed from child labour, nor is their protection or well-being secured through effective interventions. Therefore, the most successful approaches are those that focus not solely on the elimination of child labour but on its remediation.

In addition, efforts that include a limited set of actors result in limited action. For example, private-sector organizations may attempt to eliminate child labour but the work they undertake in isolation from governmental efforts may provide results in a narrower area than if they were to collaborate on a broader level.

The next section explores examples of innovative approaches that address some of these challenges

and push the boundaries of what is considered to be good practice today.

Innovative approaches

There is no single approach to addressing child labour in upstream supply chains. It is a complex issue that requires a multifaceted response. Often, a combination of private- and public-sector approaches using partnerships and industry

platforms can lead to change. Some efforts will be effective for short-term changes, others for longer-term shifts, and applying more than one approach may have value.

Addressing the root cause

To be successful, efforts should address the root cause of child labour. Generally speaking, the root cause is not the fact that a child is working in unsafe or hazardous conditions; the cause is the driver that pushed the child to work initially. Therefore, child labour interventions that fail to address the reason the child began working may fall short and may not be sustainable. Addressing the root cause means understanding why children in a specific community are working, and engaging with local actors to address those issues.

In the West African cocoa sector, a combination of public scrutiny and US legislation led to the creation of myriad public-private partnerships alongside private-brand action and to guidance from multilateral institutions aimed at eliminating child labour. More than a decade later, child labour is still rampant in the cocoa sector. A slight decrease may have occurred within specific brand supply chains, but the increase in cocoa production has been accompanied by an absolute increase in child labourers.⁸⁵ It is both a large-scale and complex challenge.

Efforts to eliminate child labour in cocoa are now refocusing on issues of farmer poverty as a related root cause. For example, in 2016, chocolate maker Barry Callebaut launched a sustainable chocolate initiative called Forever Chocolate, creating a new set of goals for its cocoa work. The company reported:

As a direct result of cocoa farmer poverty, it is estimated that there are more than 2 million children working on cocoa farms in Côte d'Ivoire and Ghana. Despite investments in education and awareness raising in the past years, and despite higher school attendance, the cocoa industry and cocoa origin countries have not succeeded in structurally eradicating child labor. Tackling poverty is a long term solution to child labor, but in the short term we need to put in place solid monitoring and remediation systems, in order to identify and forever eliminate child labor. In addition we need to work with governments, community leaders and the development community in origin countries to enforce existing laws and regulations against child labor, to provide an adequate school infrastructure, ensuring school attendance and availability of financial support in cocoa farmer families to send children to school. We need to support awareness raising and a change in the perception in the communities themselves.⁸⁶

The stated aim is to have both a short-term and long-term impact on the issues and to approach problem-solving through multiple avenues and programmes. One specific goal of Barry Callebaut is to lift 500,000 cocoa farmers out of poverty. By improving household income, the hope is that families will emerge from poverty, have the ability to invest in their farms and create a more sustainable livelihood. Training in farming and finance can help make farmers more resilient in the face of market changes or crop challenges.

Eliminating obstacles to access schooling

Conversely, removing a child from work does not necessarily ensure they enter school. Barriers often prevent children from attending school, either because they are behind, have never enrolled or lack money to pay for fees or registration. They may also lack the required documents to register for school, such as birth certificates. In some cases, the community itself does not have the appropriate facilities, adequate supplies or qualified teachers, or sometimes even a school. Ensuring that these obstacles are

eliminated or managed is an important corollary to removing children from labour and guaranteeing their path to a better future.

Various interventions include working with civil society and government to access birth certificates, covering school fees or costs related to supplies and uniforms, or making bridge programmes or transition schooling available, to help children who have missed significant amounts of schooling to catch up.

Creating child labour free zones

As exemplified in similar work being carried out by civil society in India, a comprehensive effort to eliminate child labour within a community must run through all sectors. Otherwise, an effort to remove children from cotton may result in their work shifting to another crop or another sector. By working across the entire community to raise awareness of the importance of education and the need to prevent children from engaging in hazardous work, a community can transform into a 'child

labour free zone'. This requires the involvement of the entire community: parents, village leaders and local authorities, teachers, employers and children themselves. Implementing the child labour free zone involves awareness raising across the community, sensitization to the way child labour infringes on child rights, an understanding of the importance of and right to education, and a focus on both parents and employers agreeing it is no longer acceptable for children to be involved in labour.

Collaborating in a holistic manner

"If you want to go quickly, go alone. If you want to go far, go together": companies often quote this proverb when contemplating their corporate responsibility plans. Companies seeking to eliminate child labour throughout their upstream supply chain will have greater success and a broader impact if they work with a range of relevant actors, including other companies involved in the same geographic region, other companies in the same sector and in other sectors in the region, civil society organizations, both national and local government, and community representatives.

In addition to engaging with a full range of local stakeholders, companies can broaden their impact

by engaging with national government. Company efforts, such as the child labour monitoring systems deployed in Côte d'Ivoire, can have narrow success within that company's supply chain. To reach scale, government should deploy the efforts that have been successful in smaller corporate endeavours at the national level.⁸⁷

These efforts to expand impact, to involve a broad range of stakeholders, to address root causes and to target all the children in affected communities are a few examples of the innovations companies are making to eliminate child labour in their Tier 4 supply chains.

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