Solidaridad

COTTON AND LABOUR

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EXECUTIVE SUMMARY

CONTEXT

- Climate change and extreme weather are becoming significant challenges for the cotton sector. All global cotton growing regions will be exposed to increased risk from at least one climate hazard by 2040. Extreme-weather events will worsen without dramatic intervention, and poorer cotton producers are expected to suffer disproportionately. Smallholder cotton production in particular is less mechanised, with associated risks from heavy lifting, long hours in hot environments, and exposure to harmful agrochemicals. This topic is dealt with at length in our previous paper "Cotton and Climate Change". Smallholder farmers who already live in poverty because of low cotton prices are not resilient enough to be able to adapt to these changes to ensure reliable production.
- COVID-19's shutdown of economies in the first part of this decade caused lower demand and lower prices for cotton. Order cancellations immediately affected over 20 million smallholder cotton farmers and value chain operators in Africa.
- In small-scale farming women provide a large part of the labour. An estimated 42.7% of all cotton farmers are women. Women usually do most of the work in the cotton fields, and are disproportionately involved in physically demanding processes. Across continents, women are strongly involved in cotton cultivation, they are likely to work in the same cotton-related activities (picking, planting and field management) but are not recognised as farmers, with little access to land, decision making, education or financial services and are often paid less too.
- Traceability and transparency remain a key concern. While most value chain actors agree that traceability will be crucial for due diligence, in tackling issues around forced and child labour, unsustainable practices, and gender disparity, the implementation of such traceability systems are fragmented.

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LEGISLATIVE DEVELOPMENTS

- There has been significant movement by the European Union and nation states to address problems in international supply chains.
- The recent passage of the EU's Corporate Sustainability Due Diligence Directive (CSDDD) and the EU's Forced Labour Regulation will put a much greater onus on brands to ensure that the products they sell in Europe meet human rights and environmental standards. The CSDDD will also require companies to invest in their supply chains to address problems, rather than simply switching to 'safer' suppliers.
- The European Commission has also created a sustainable directive for the textile industry by launching the EU Strategy for Sustainable and Circular Textiles. The strategy is based on data that highlights the negative impact the textile sector has on the environment and aims to make textiles more durable, repairable, reusable, and recyclable. The proposed measures will impact both consumers and companies within and outside the EU, and aim to increase transparency, sustainability, and responsibility throughout the textile chain. By implementing this strategy, the Commission aims to mobilise designers, producers, retailers, advertisers and citizens in re-defining fashion. Some of the measures include: mandatory minimums for the inclusion of recycled fibres in textiles - increasing the demand for recycled cotton; the introduction of a Digital Product Passport for textiles - where consumers can find the environmental impact of the product (including the specific fibre); and a higher scrutiny of 'green' claims.

POVERTY

- Global brands make massive profits from the sale of cotton products, but the smallholders on whom they depend remain poor – they generally are not resilient enough to invest in their own livelihoods. It is generally accepted that they are not earning a living income. In order to change this they would need to receive a fairer share of the value of cotton on the global market.
- Improving farmers' livelihoods has usually been addressed through attempts to increase productivity, improve access to markets and market information, and/or stronger producing organisations. However, small-scale cotton farmers are still poor. The root causes are not being addressed and prices have not been increased.

- Poverty is both a root cause of unsustainable cotton farming practices and an obstacle to the adoption of sustainable farming practices. Poverty limits access to good training on profitable and sustainable practices, which are key to improving sustainability and resilience.
- Value chain actors have focused on some interventions more than others; expanding farm land to grow cotton, increasing yields, managing production costs, and cotton's common use as a rotation crop to help diversify income.
- Poverty is the biggest driver of exploitative child labour, especially in poorer rural settings, only emphasising the need for retailers and brands to ensure farmers are receiving a living income.

FORCED AND CHILD LABOUR

- Across the world people are using or wearing cotton products that are produced as a consequence of exploitation. In 2021 it is estimated that about 26.7 million people were the victims of forced labour. The distinctive features of forced labour in cotton depend on the context of the region involved, and whether or not it is driven by state or non-state exploitative actors. Some common characteristics include labour that is compelled through hereditary debt, deceptive recruitment, violent regional conflicts, and displacement.
- Reports suggest that forced labour, including child labour and state enforced labour, is common in many cotton producing regions. Cotton, harvested by forced labour, has entered international supply chains. While some national bodies have attempted to curtail the import forced labour associated with cotton from certain regions, the wide and varied realities of forced labour in the sector mean that without improvements in transparency and traceability this will remain a disparate effort.

THE IMPACT OF AGROCHEMICALS

- Cotton production has been troubled by over-use of synthetic pesticides as farmers seek to control insects, weeds and diseases. The most dangerous pesticides are characterised by UN agencies and others as 'Highly Hazardous Pesticides' or 'HHPs'. Poorer farmers are risk averse. The imperative to protect their crop and their livelihood may drive excessive pesticide use. Regulation also plays a role, as regulators in low-income countries do not have the capacity to fully evaluate the impact of pesticides on human health.
- Severe symptoms of pesticide poisoning include unconsciousness, incontinence, seizures, and death. Exposure can have long-term health effects such as increased risk of cancer, nervous system disorders and reproductive problems.
- The global policy framework on this topic is now clear. The UN's Global Framework on Chemicals commits countries and companies to phase-out Highly Hazardous Pesticides from agriculture.
- While several voluntary standards have been working towards either a phase-out or ban of HHPs, national regulation is key to prohibiting the use of pesticides at the national level. Governments in producing countries must use their regulatory role to tackle exposure to HHPs.
- 4 out of the top 10 most commonly used pesticides in Brazil are banned in the EU for their danger to human health and the environment.

RECOMMENDATIONS FOR BRANDS

- Take responsibility for your value chain by investing in producers, by going beyond purchasing 100% certified cotton and supporting farmers to make improvements on the ground.
- Raise the bar on transparency, by enabling long term contracts, spreading payments, and being transparent about purchasing practices and prices.
- Improve purchasing practices, embrace due diligence, and work towards fair prices, a living wage and income for farmers and workers.
- Respond constructively in cases of forced/child labour.
- Support Standards to add more value, push them to raise their ambition, and work with standards that guarantee sustainable price setting and production.
- Proactively engage with Multi-Stakeholder Initiatives (MSIs) that play a critical role in addressing issues at farm level.

Chapter 1

INTRODUCTION

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There are an estimated 24 - 32 million cotton farmers worldwide, with millions more seasonal workers. While in a few countries cotton is grown on a large scale, the majority of the world's cotton farmers are smallholders who are facing the greatest challenges of anyone in the cotton value chain.

While global brands make massive profits from the sale of their products, the cotton smallholders on whom they depend remain poor – they generally do not earn a living income and are not resilient enough to invest in their own livelihoods. Additionally, they face untenable working conditions, compelled by economic realities to resort to dangerous production processes and hazardous chemicals. The spectre of forced labour lingers over the industry, despite recent legislative progress on that front.

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This paper focuses on labour issues in the production of cotton by smallholder farmers. Broadly, it tackles three interconnected topics affecting cotton smallholders:

1. **Poverty and the lack of a Living Income**
2. **Forced and Child Labour**
3. **The Impact of Agrochemicals on the Health and Safety of Cotton Workers**

Together this interconnected triad traps smallholder cotton labourers in a vicious and unsustainable cycle. Only direct intervention in the 'business as usual' approach of cotton supply chain actors can turn the situation around.

Following from this analysis, this paper will make recommendations for cotton value chain actors to address some of these issues.

The Sustainable Cotton Hub

This paper is published on the SustainableCottonHub.org which seeks to lay out the sustainability challenges in cotton production, looking at economic, social and environmental sustainability factors through a series of studies and papers. Following in the footsteps of three editions of the Sustainable Cotton Ranking published in 2016, 2017, and 2020, the first paper on Corporate Responsibility in the cotton sector was published in April 2023. The second paper, tackling Cotton and Climate Change was published in November 2023.

Further papers are planned, and concrete recommendations for the various actors across the cotton value chain will accompany many papers, offering realistic ways forward to make meaningful change.

Please get in touch with your comments and questions, or join the conversation on social media and search or use #sustainablecottonhub. The Sustainable Cotton Hub is open for collaboration with other civil society organizations.

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While a vast range of different factors impact the realities of labour in cotton production, some prevailing global trends influence the current state-of-play in the sector.

Climate change

Climate change and extreme weather are becoming significant challenges for the cotton sector. As Cotton 2040 identifies; "Climate change can cause direct damage to cotton crop either through gradual, incremental, changes, such as atmospheric warming or changes in total rainfall, or through sudden changes and extreme weather events such as flooding, hailstorms or heatwaves."[1]

This is already happening. As Textile Exchange noted; "This growing season [2022-23], we've seen the cotton industry suffer through floods, droughts, pest plagues, and fires across the globe, affecting farmers, ginners, traders, suppliers and many others involved in the textile industry."[2] In 2022 alone, flooding in Pakistan killed approximately 1,700 people, and decimated around one-third of the country's cotton crop[3], while drought in the USA (similar to 2010 and 2012) led to record abandonment of cotton harvests resulting in approximately 14 million fewer cotton bales than the previous year.[4]

Instances of heavy rainfall or flooding can particularly impact cotton plant growth because of the root structure. Cotton's vertical tap root makes it susceptible to becoming waterlogged, wherein the root cannot absorb adequate nutrients or oxygen from the soil.

All global cotton growing regions will be exposed to increased risk from at least one climate hazard by 2040.[5] Extreme-weather events will worsen without dramatic intervention, and poorer cotton producers are expected to suffer disproportionately.

Smallholder cotton production in particular is less mechanised, with associated risks from heavy lifting, long hours in hot environments, and exposure to harmful agrochemicals.[6, 7]

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Global crises and volatility

Macro issues have created an unparalleled level of stress in the cotton sector, disrupting supply chains, price projections[8], production, and producers. Many of these issues have continued to cause volatility, even long after they began.

No single region has been unaffected by the global volatility caused by the outbreak of COVID-19 and the subsequent shutdowns that took place across the globe. COVID-19's shutdown of economies across the globe caused many brands to cancel orders or drastically reduce their orders, leading to lower demand and lower prices for cotton, reducing production between 2019/20 and 2020/21 by 7%.[9, 10] Order cancellations immediately affected over 20 million smallholder cotton farmers and value chain operators in Africa.[11] It also caused several shocks to the movement of cotton, which took time to resolve.[12] Demand for raw cotton mostly rebounded in 2020/21, in part due to government policies to sustain incomes in consuming countries.[13]

This was followed closely by the beginning of the conflict between Russia and Ukraine, which continues to undermine global trade relations to this day. Following the invasion of Ukraine in 2022, several countries imposed sanctions on Russian and Belarussian exports. This affected the costs and availability of key fertiliser ingredients[14], and fertiliser costs for some developing countries increased by 295% between 2020 and 2022.[15] The urgency to reduce the use of fertilisers through the adoption of alternative agricultural practices to address cotton's farm economics and environmental impacts has never been greater.[16]

Additionally, rising inflation, predominantly driven by energy prices, has led to increased costs for cotton producers[17] (including for producers who use power for irrigation systems or other mechanised production methods). For poor smallholder farmers with fewer resources, and fewer alternatives, the pressures will only be greater.

Other recent conflicts, such as the resurgence of conflict in Gaza may have an impact, although at this point in time it is unclear what the long-term results may be.

Gender

While the extent of global volatility is a relatively recent pressure on the cotton production system, endemic issues remain a key point of concern. These include disparities between the roles of men and women in cotton farming. The role of gender and its consequences for the lives of cotton farmers is perennial.

An estimated 42.7% of all cotton farmers are women[18], but especially in small-scale farming women provide a large part of the labour.

> **ACROSS CONTINENTS, WOMEN ARE STRONGLY INVOLVED IN COTTON CULTIVATION. THEY ARE LIKELY TO WORK IN THE SAME COTTON-RELATED ACTIVITIES (PICKING, PLANTING AND FIELD MANAGEMENT)[19], BUT ARE NOT RECOGNISED AS FARMERS, WITH LITTLE ACCESS TO LAND, DECISION MAKING, EDUCATION OR FINANCIAL SERVICES AND ARE OFTEN PAID LESS TOO.[20]**

In small-scale family cotton production, since women are mainly involved together with their husbands, their work often goes unrecognised. In Asia, this is due in part to the concept of the 'family farm'. This is a unit used to assess the numbers of smallholder farmers, and contributes to the invisibility of women labour in these contexts.

There is a gender gap when it comes to representation in farmers' associations and cooperatives, or access to assets (such as land ownership), inputs (such as seeds or pesticides), and services.[21] Women farmers with less access report being less positive about prosperity and inclusivity.[22]

As Better Cotton have noted; "When cotton production becomes more capital, knowledge and technology intensive, women's participation in planting and harvesting activities tends to decrease comparatively. Instead, machines and (predominantly) male workers take over."[23] The same is also true for the more 'business' related elements of cotton production, which can be more acute for cash crops than subsistence crops. Therefore, cotton actors should be mindful when supporting smallholder farms to modernise that they consciously upskill and support women to enhance their role in the sector, and that their work is paid equally and sufficiently.

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Traceability & Transparency

Traceability and transparency remain a key concern. While most value chain actors agree that traceability will be crucial for due diligence, in tackling issues around forced and child labour, unsustainable practices, and gender disparity, the implementation of such traceability systems are fragmented.

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.'[24] It means we should be able to know where (geographically) and how (by what means, processes and under what conditions) each component of a product is made. For a cotton product, it includes where and how the cotton was produced, and its path through the entire value chain.

In practice there are many details and questions that need to be answered in order to select and implement a traceability system[25], and within the cotton sector a variety of technologies are available to help with that choice (such as Permanent Bale Identification, applied markers (such as pigments), blockchain, supply chain mapping, isotopic tracing, or DNA analysis). There is no 'one size fits all' approach however, and the different information needed to trace a material through its unique value chain can result in different levels of traceability. Thus, not all traceability systems are equal, or fit for the purpose for which they are intended.

Traceability and transparency are closely related, but distinct. Transparency 'relates directly to relevant information being made available for all elements of the value chain in a harmonised way, which allows for common understanding, accessibility, clarity and comparison.'[26] Transparency is essentially about (public) disclosure and awareness of the actions of value chain actors.

Traceability should feed into transparency so that sustainability risks in cotton's long, fragmented, and opaque value chain can be managed and the relevant actors held accountable for their sustainability performance. Traceability and transparency are increasingly becoming a business imperative[27] and patience with companies who fail to improve their supply chain traceability and transparency is wearing thin; with operational and reputational risks around supply chain sustainability becoming too costly while technologies that enable traceability are readily available.

Recent legislative action has made the business case for traceability even clearer. For instance the EU has an evolving regulatory environment in textile consuming markets[28] due diligence legislation[29]. The European Commission has also adopted a proposal for a directive on green claims a proposal which requires companies to substantiate claims they make about environmental aspects or performance of their products and organisations using robust, science based and verifiable methods. These new realities, coupled with consumer demand, is emphasising more than ever before that Retailers and Brands should know where the cotton in their products comes from - and to communicate publicly about it.

Our own research, as showcased in the Cotton Rankings, reveals that out of the 82 major cotton buyers ranked in 2023, 44 companies published incomplete or not data as regards to how much of their supply chain includes sustainable cotton

What is needed is the will and commitment by value chain actors to implement traceability systems, supported by the policies, norms and standards, capacity building and collaboration needed to ensure it functions properly. Without sufficient transparency and traceability, no-one can make informed decisions[30] or manage and respond to risks.

Consumers, investors, CSOs and governments are all putting pressure on companies to prove their sustainability claims and that they are not connected with illegal practices like forced labour, deforestation, or pollution.[31]

Some players in the industry are finally investing in traceability that will enable companies to implement and comply with due diligence requirements.[32] How successful these efforts are, will depend on the extent to which producers (particularly smallholder farmers and workers) and their environments benefit. All value chain actors should therefore remain vigilant that traceability or transparency do not become tools to exclude disadvantaged cotton farming communities.[33]

A changing legislative landscape

Despite these seemingly intractable issues, 2024 begins with the passage of two major pieces of legislation from the EU, which may change the regulatory landscape of cotton. These are the Forced Labour Regulation and the Corporate Sustainability Due Diligence Directive, whose potential impacts will be felt throughout the sector.

EU Forced Labour Regulation

The EU Forced Labour Regulation (FLR) stands out as the first EU-wide instrument to address forced labour systematically. In association with the EU Corporate Sustainability Due Diligence Directive, it will create a much stronger incentive for companies to map their supply chain down to the raw material producers' level, identify risks of forced labour and address them (mitigate, bring to an end, and remediate) appropriately.

The EU FLR comes with key features: the complaint process is centralised at EU level and accessible to anyone: victims themselves but also local communities, trade unions, civil society organisations or any other organisation. The confidentiality of the complainant's identity will be preserved to prevent risks of retaliation. As the EU FLR covers products made anywhere in the world, the European Commission will lead investigations where forced labour is happening outside of the EU while each Member State will lead in cases happening under their jurisdiction. Enforcement of all decisions will however always be the same throughout the EU.

Based on a risk-based approach where severity and scale will be assessed, investigations will be opened which, when leading to a determination that a product has been made, in total or in part, with forced labour, will compel the companies concerned to remove that product from the EU market and to dispose of it (either by recycling or rendering it inoperable, or, for perishable products, by donating it to charitable or public interest purposes).

In order to avoid cut & run by the companies under scrutiny, the investigation process will require companies to provide information at different stages of the investigation. For example, to explain the due diligence measures they implemented or the measures taken to end the situation of forced labour and remediate it. This should incentivise increased engagement between buyers and their suppliers, including cotton producers, to ensure that all along the supply chain decent working conditions are in place. Moreover, upon invitation by the lead authorities, relevant stakeholders such as civil society, trade unions, or multi-stakeholder initiatives may be asked to provide further information on the case under scrutiny to ensure that a wide range of views and


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sources of information can be triangulated in deciding whether to take the investigation ahead or to inform the final decision.

If a company does not cooperate in the investigation, or if the country where they are based does not allow field inspections, or if the information received is deemed falsified or in any other way unreliable, the lead authorities will still be able to ban a product.

Though the measures proposed (a product-by-product ban where no regional or production-site bans are possible) are not strong enough to meaningfully address SIFL, it still gives a clear signal that the EU will not tolerate products made with forced labour entering the European market.

The new Forced Labour Regulation combined with the Corporate Sustainable Due Diligence Directive (CSDDD) creates an obligation for buyers to support improvements in these areas, which they may choose to by improving purchasing practices, potentially greatly benefiting producers in the chain who have typically struggled with low prices and short lead times.

EU Corporate Sustainability Due Diligence Directive

The European Union's Corporate Sustainability Due Diligence Directive (CSDDD) has the potential to significantly impact the cotton sector. With the goal of making companies accountable for adverse human rights and environmental impacts in their operations and value chains, the Directive will require companies to identify, prevent, mitigate, and account for these adverse impacts. This will likely lead to a heightened focus on traceability and transparency in cotton production.

For cotton producers, particularly smallholders, the CSDDD could present both challenges and opportunities. This reflects their dual role as business partner and a rightsholder. On the one hand, due diligence processes from buyers may require that suppliers provide more information and commit to changes in farming practices, which could result in additional costs. However, the CSDDD's focus on human rights, including labour rights, is expected to lead to improvements in working conditions for cotton farmers.

For instance, companies under the CSDDD should consider if smallholder farmers have healthy and safe working conditions and if they earn a living income or wage. When working on improvements to address the risk of not respecting these human rights, companies will be asked to consider the role of their own procurement practices and business models, and to work collaboratively with their suppliers to improve conditions.

The success of the CSDDD in improving the cotton sector will depend on its implementation. Collaboration between all stakeholders, including brands, retailers, producers, and civil society organisations, will be crucial.

OVERALL, THE CSDDD HAS THE POTENTIAL TO BE A GAME-CHANGER FOR THE COTTON SECTOR, DRIVING PROGRESS TOWARDS MORE SUSTAINABLE AND EQUITABLE PRACTICES.


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Chapter 3

POVERTY AND A LACK OF LIVING INCOME

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Absence of Living Income for smallholder cotton farmers

Definitions of a living income vary, but in this case we accept the understanding of a living income as the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household. Elements of a decent standard of living include food, water, housing, education, health care, transport, clothing, and other essential needs including provision for unexpected events.[34, 35] A living income is not an end target, but a bare minimum.

There is not a lot of reliable information available on living incomes for smallholder cotton farmers, but they are often poor and generally do not earn a living income. In order to change this, they would need to receive a fairer share of the value of cotton on the global market: a higher price that can pay for (at least some of) the needs listed above.

In a few countries, intensive large-scale cotton production is heavily subsidised meaning farmers can sell their crops below the real costs of production. However, the majority of cotton farmersare smallholders, owners of farms of less than 2 hectares, who are severely affected by market liberalisation. As a result, the economies of entire regions in Africa and Asia have been affected in recent decades and a significant part of their population is abandoning cotton cultivation, or even farming.[36]

Cotton is a cash crop. For smallholders the income from selling cotton is a necessary complement to growing food crops. However, planting cotton is a risky business with low profit margins for many producers[37], and several factors outside of the farmers' influence can determine whether a season will be profitable. For instance, input costs (worsened by inflation, and higher energy and fertiliser costs), labour costs (especially where mechanisation is not an option), climatic conditions, access to mechanised farming methods or irrigation, cotton quality, contract failure, or foreign exchange risks. While some techniques exist to mitigate the risk of growing an unprofitable crop (for example hedging against falling cotton prices by taking up a position in the cotton futures market, or crop or weather insurance), they are still mostly used in developed countries or by large companies, and are inaccessible to smallholder farmers in developing countries.

Cotton is a commodity traded around the world and, consequently, its price can fluctuate**.** Recent crises even meant that price prediction became impossible.[38] This leaves cotton farmers at the mercy of the market and supply chain conditions on which they have very limited influence.

The price of cotton is influenced by multiple factors, including supply and demand, the price of other crops, and alternatives to cotton.[39] Smallholder farmers tend to be more content in countries with minimum price or trade protections[40], but small-scale cotton farmers generally lack market information that goes beyond a current national price, or the price offered by ginners,

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making it difficult for farmers to choose the right crop to plant. Yet cotton prices have a real impact on farmers' livelihoods; when world cotton prices declined by 40% in 2001/02, rural poverty among cotton growers in Benin increased from 37% to 59%.[41]

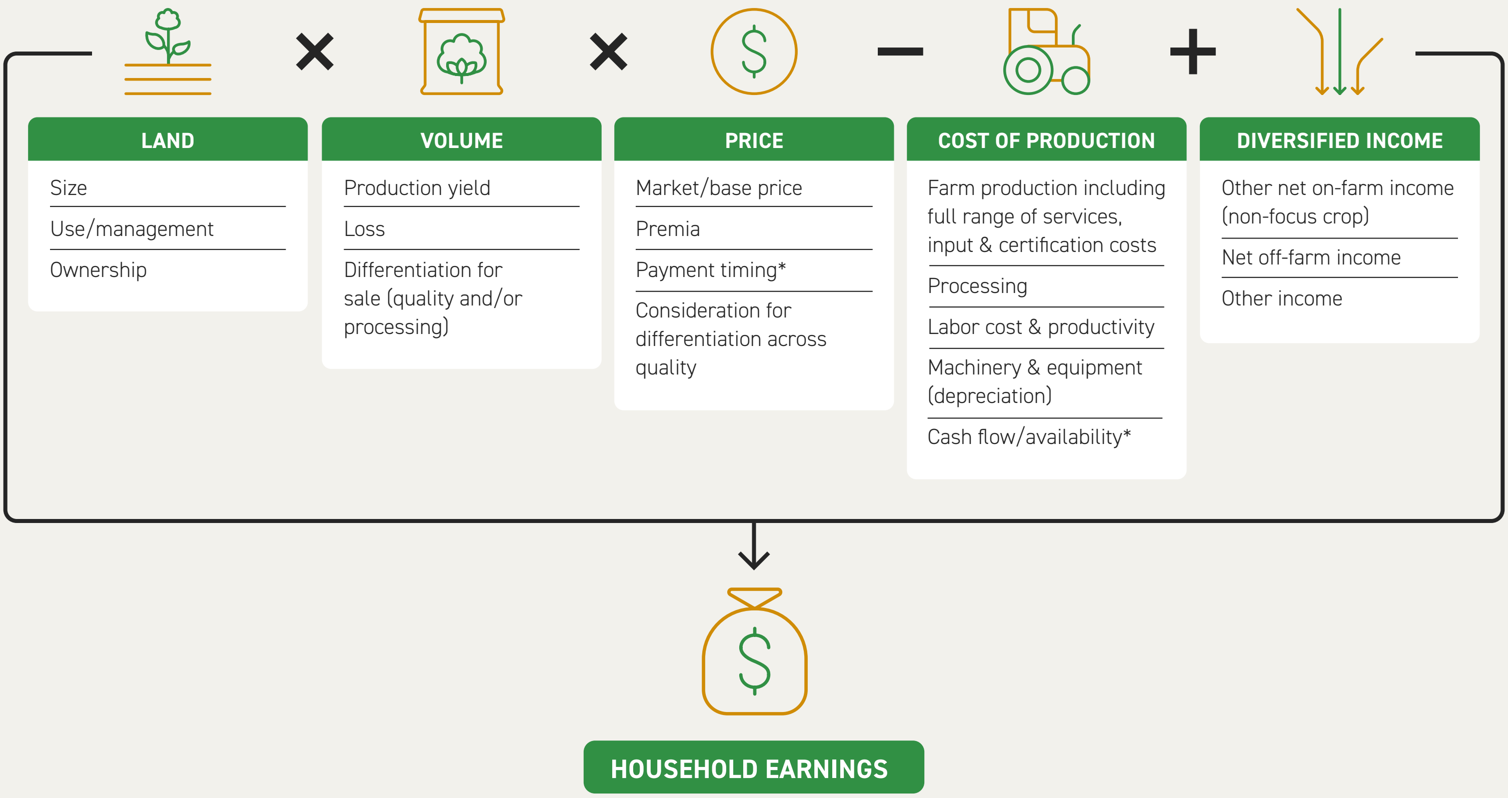
Tackling cotton poverty

Improving farmers' livelihoods has usually been addressed through attempts to increase productivity, improve access to markets and market information, and/or stronger producing organisations. However, small-scale cotton farmers are still poor. The root causes are not being addressed and prices have not been increased.

For many smallholder farmers there are no appropriate alternatives to cotton that provide a living income, and farming often represents a cultural or familial heritage. Therefore, this is a problem that we cannot dodge; there will be no sustainability in cotton production while cotton farmers are both poor and inadequately supported.[42]

IDH identifies the range of interventions that should be used by organisations to support a living income for farmers in general.[43] If we apply this model to cotton production we see that value chain actors have focused on some of these interventions more than others; expanding farm land to grow cotton, increasing yields, managing production costs, and cotton's common use as a rotation crop to help diversify income.

POVERTY IS BOTH A ROOT CAUSE OF UNSUSTAINABLE COTTON FARMING PRACTICES AND AN OBSTACLE TO THE ADOPTION OF SUSTAINABLE FARMING PRACTICES. POVERTY LIMITS ACCESS TO GOOD TRAINING ABOUT PROFITABLE AND SUSTAINABLE PRACTICES, WHICH ARE KEY TO IMPROVING SUSTAINABILITY AND RESILIENCE.



SOURCE: Close the gap and track progress.
IDH - the Sustainable Trade Initiative.

One driver is usually the elephant in the room in cotton sustainability discussions: price - and the connected topics of company purchasing practices, unequal power[44] and value distribution across the value chain.
It has been noted that for some smallholder farmers, a 5% increase in yield may equate to a 100% increase in profits.[45] This line of thinking attempts to put the responsibility for responding to poor prices onto farmers, and can subsequently exacerbate over-production and poor farming practices - seeking short-term yield gain at the expense of resilience and long-term soil health and productivity.[46] We should not only be making progress on what farmers can do to earn a living income, but also what companies should be doing including improving purchasing practices and raising prices.

Furthermore, training is an integral factor to tackling cotton poverty. While some retailers, brands, or standards may arrange enough farmer training to gain certification, their success is often only measured in yield or productivity, and not longer term farmer profitability. High-quality training has been shown to both decrease production costs and increase incomes.[47, 48, 49]

Governments have a role to play in this transition by building strong extension services, by focusing research on sustainable and agroecological agriculture, increasing land rights, and access to finance and agri-inputs.

A living income is still the bare minimum a family needs to live in dignity. Living income is the starting point of a conversation on farmer livelihood, not a finish line.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Chapter 4

FORCED AND CHILD LABOUR

Across the world people are using or wearing cotton products produced as a consequence of exploitation.[50] In 2021 it is estimated that about 26.7 million people were the victims of forced labour.[51]

Forced labour in cotton is endemic, but does not take on one shape. Labour looks different depending on the size of the farm and level of mechanisation. Ranging from large farm contexts with a combination of 'fixed' (contract), seasonal and specialised workforce (e.g. in Australia, USA, and Brazil) to smallholder farming with family, community, and seasonal labour in South Asia, Western and Sub-Saharan Africa, and Western and Central Asia.[52] An absence of technical equipment means a significant labour requirement especially during the most labour-intensive phases of the cultivation cycle (such as harvesting), and some of which involve a range of hazardous activities and circumstances (such as pesticide application).

A person can be forced to work against their will for a variety of reasons, though most usually they are disadvantaged or vulnerable due to their migration, economic, minority, displaced, indebted, or trafficked status. According to the International Labour Organization's Forced Labor Convention, 1930 (No. 29), forced or compulsory labour is "all work or service which is exacted from any person under the threat of a penalty and for which the person has not offered himself or herself voluntarily."[53] State-imposed forced labour is when governments force their citizens, conscripts, or prisoners to work. This can be used as a method to mobilise labour for economic development, to punish political dissents, or to discriminate against religious and ethnic minorities. In many cases, state-imposed forced labour can link to our global supply chains, such as the cotton supply chain.[54]

The distinctive features of forced labour in cotton depend on the context of the region involved, and whether or not it is driven by state or non-state exploitative actors, but common characteristics include labour that is compelled through hereditary debt, deceptive recruitment, violent regional conflicts, and displacement.[55] Coercion from local officials is a common feature of forced labour in cotton, and the threat of loss of employment is used as a pressure point on low-ranking government employees in certain contexts.[56] In many cases, forced labour is connected with human trafficking, with evidence of sometimes mass people movement and internment by the state. This problem may also persist in West African nations such as Burkina Faso, where the common reality of child migration sometimes masks outright trafficking.[57] Forced labour can be seen in all stages of cotton production: cultivation, harvesting, ginning, and manufacturing. Cultivation and harvesting can expose workers to harsh conditions and long hours, as well as dangerous agrochemical inputs such as pesticides and its attendant risks. These are issues facing voluntary cotton workers as well.[58] Much work has been done exploring the realities of forced labour in different regional contexts.[59]

Reports suggest that forced labour, including child labour and state enforced labour, is common in many cotton producing regions. Cotton, harvested by forced labour, has entered international supply chains. While some national bodies have attempted to curtail the import forced labour associated with cotton from certain regions, the wide and varied realities of forced labour in the sector mean that without improvements in transparency and traceability this will remain a disparate effort.[60, 61, 62, 63]

It is possible to stop state-imposed forced labour. Since reports from Azerbaijan that public sector employees were coerced into harvesting cotton in 2018 affordable harvesting machinery has become more widely available and no further reports have been received.[64, 65] A big success story has been Uzbekistan. In recent years, state-imposed labour in Uzbekistan was effectively eliminated in cotton harvesting[66], with the government tackling trafficking and allowing the ILO to monitor cotton harvests.[67] However, the direction of travel is not one way, and in 2023 reports have emerged of government officials using coercion to address a labour shortage in cotton picking, which is a concerning backslide.[68]

Child labour in cotton production

71% of all child labour takes place in agricultural supply chains, with cotton being one of the most common products produced with child labour across at least 18 countries.[69] Both children and adults have been the victims of trafficking for the purposes of forced labour in the cotton sector, in at least Pakistan, Tajikistan, and Turkmenistan.[70] The ILO have noted that forced child labour may also occur in nations where governments have a key role in the cotton sector, and where cotton is seen as a 'strategic crop'.[71]

“ POVERTY IS THE BIGGEST DRIVER OF EXPLOITATIVE CHILD LABOUR, ESPECIALLY IN POORER RURAL SETTINGS, ONLY EMPHASISING THE NEED FOR RETAILERS AND BRANDS TO ENSURE FARMERS ARE RECEIVING A LIVING INCOME.[72]

Other drivers include barriers to education, weak legislative environments, and historical practice. Depending on the context, children are reported to be involved in manual cotton harvesting, pesticide application, weeding, watering, ginning, and hybridisation of cottonseeds.[73] The COVID-19 pandemic saw an increase in child labour, as school closures, lockdown restrictions, and economic pressures mounted on smallholders.[74]

Children do not need to be directly exploited in order to be the victim of forced labour. Children of those forced into labour in the cotton sector, or those impacted by poor labour conditions and poverty, also face serious challenges. Here poverty remains the key driver and therefore the best means of addressing the exploitation or poverty of children in cotton communities is to pay their parents or guardians a living wage.[75]

A note on child labour in cotton

Not all work carried out by children is exploitative however, as the ILO have noted: “Many children work on family cotton farms helping out their families during busy harvest times and not all of this work is child labour.”[76] For smallholder farms, especially those with a cultural and family heritage, it is not unreasonable for the whole family to be involved - limited, age-appropriate “children’s work” is permitted. However, this should never interfere with a child’s education or upbringing, and should not involve a child being put into unsafe circumstances, such as handling hazardous materials, using dangerous tools, or working long hours.

Chapter 5

THE IMPACT OF PESTICIDES ON THE HEALTH AND SAFETY OF COTTON FARMERS & WORKERS

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Cotton growers are faced with a number of serious health and safety issues in their day-to-day work environment. Some of the most substantial hazards facing cotton producers, however, arise from their use of pesticides.[77] This rather neglected issue will be addressed in this chapter.

Pesticide Usage in Cotton Production

Cotton production has been troubled by over-use of synthetic pesticides as farmers seek to control insects, weeds and diseases.[78] The most dangerous pesticides are characterised by UN agencies and others as 'Highly Hazardous Pesticides' or 'HHPs'. Although many of the HHPs are regarded as 'old chemistry', they often remain in use in cotton production worldwide. This is partly because they may be cheap, off-patent products and also because many farmers lack access to good quality training in integrated pest management and other key aspects of maintaining a healthy crop, such as soil health[79]. Many farmers are not aware of the potential consequences of over-using synthetic chemicals on their own health[80] , or the health of the ecosystem services on which their future production depends. Over time, problems such as pest resistance build up, leading farmers into a spiral of escalating pesticide use and diminishing returns. Chronic health effects may take years to emerge and farmers may not associate them with pesticide exposure[81].

Poorer farmers are, understandably, particularly risk averse. The imperative to protect their crop and its livelihood may drive excessive pesticide use. However, regulation plays a major role too. Regulators in low-income countries do not have the capacity to fully evaluate the impact of pesticides on human health[81]. This is one reason why, along with heavy industry influence and other factors, many HHPs that are banned in richer countries remain available to farmers in Low and Middle Income Countries (LMICs). In many cases these pesticides are even manufactured and exported from countries where they are banned, such as paraquat (often marketed as Gramoxone) which is manufactured by Syngenta in the UK, despite being banned for use in the UK[82].

In seeking yield improvement, farmers may be encouraged to over-apply fertilisers and pesticides, but this wastes farmers' resources and increases pollution without any yield benefit[83]. Other factors such as building soil health, improving seed varieties or improving farmers' capacity to implement good farming practices have historically been ignored.

Global usage of pesticides has been increasing for decades, and is a significant contributor to biodiversity loss, including global insect decline.[84] Neonicotinoids are among the most used insecticides worldwide, and are up to 10,800 times more toxic to pollinators such as bees than older insecticides such as DDT[85], which was banned in 1972 in the USA due extremely harmful environmental impacts. As neonicotinoid compounds are not classed by the FAO and WHO as HHPs, their use continues to be permitted, even in certified cotton growing systems. With very high levels of insect toxicity, neonicotinoids have become the most popular class of insecticide in cotton production[86]. In recent decades, the various bodies tasked with cotton promotion have reported significant reductions in the weight/volume of insecticide used, though a lack of publicly available data on pesticide use means that it is hard to verify the extent to which this reflects a reduction in pesticide application or a shift to more toxic substances.[87]

Effects of Pesticide Usage on Cotton Smallholders

Pesticide poisoning is estimated to affect around 345 million (44%) farmers and workers every year, and in many individual low and middle-income, cotton producing countries the percentage of farmers affected can even be higher than 80% each year.[88] Surveys of cotton farmers conducted using PAN UK's T-MAPP in 2022 found 2 out of 5 farmers in India, Tanzania and Benin reported acute pesticide poisoning each year, with more than half of positive cases reporting two or more poisoning incidents in the previous year.[89]

Each season many at-risk producers suffer numerous episodes of health effects from agrochemical usage. Apart from the costs of treatment, these episodes put a wider economic burden on farming households due to lost work and productivity[90].

Severe symptoms of pesticide poisoning include unconsciousness, incontinence, seizures, and death.[91] Exposure can have long-term health effects such as increased risk of cancer, nervous system disorders and reproductive problems. Some pesticides are known to be mutagenic and their impacts can pass down through generations. In some countries pesticides are a common method of suicide[92, 93]. Financial burdens, particularly the high levels of debt owed by many farmers, are an important factor linked to hundreds of thousands of pesticide suicides in India.[94] After Sri Lanka banned 36 hazardous pesticides, the annual suicide rate dropped 70%, saving an estimated 93,000 lives between 1995 and 2015.[95]

In Brazil, the world's fourth-largest cotton producing country, farmers use more agrochemicals than cotton farmers do in any other country.[96] Pesticide poisonings and groundwater contamination has been rising – in certain water samples more than 90% of the water has tested positive for pesticides.[97]

4 OUT OF THE TOP 10 MOST COMMONLY USED PESTICIDES IN BRAZIL ARE BANNED IN THE EU FOR THEIR DANGER TO HUMAN HEALTH AND THE ENVIRONMENT.[98]

However, escalating problems with pesticide resistance are also driving forward-thinking innovations in the regulation and use of biological control methods.[99]

Addressing the dangers of agrochemical inputs

Schemes attempting to mitigate the dangers of agrochemical inputs by means of Personal Protective Equipment (PPE) face many practical barriers to success when it comes to smallholder cotton farmers. Cotton is grown in hot regions where protective equipment is often uncomfortable, impractical, and too costly for smallholders. Measures to manage risk and reduce exposure (protective equipment, safer container design, and clear labels and pictograms, especially in areas with higher illiteracy) are rarely in place in these regions[83]. Paid farm labourers are especially vulnerable.[100, 101]

Placing responsibility for managing pesticide risks onto poorly trained, inadequately resourced farmers and workers, with minimal regulatory oversight, will not address these issues[81]. Instead, training farmers in effective agroecological solutions helps them to reduce costs, improve sustainability, and tackle the significant problem of health impacts.[102]

The global policy framework on this topic is now clear. The UN's Global Framework on Chemicals commits countries and companies to phase-out Highly Hazardous Pesticides from agriculture. Under the UN's Convention on Biological Diversity, the Kunming-Montreal *Global Biodiversity Framework* includes a target of 'reducing the overall risk from pesticides and highly hazardous chemicals by at least half including through integrated pest management, based on science, taking into account food security and livelihoods' by 2030.[103] The FAO and WHO's Code of Conduct for Pesticide Management also recommends avoiding the use of pesticides that require personal protective equipment that is too uncomfortable or expensive to use, a global phase-out of HHPs, and the use of agroecological alternatives.[104]

Despite global commitments, many governments continue to subsidise pesticides which encourages excessive use.[105] According to a UNEP review, agricultural input subsidies and tax exemptions "have had a limited effect on poverty incidence among smallholder farm households" and "resulted in unintended negative socio-economic and environmental impacts".[106] These subsidies have frequently been associated with overuse to the detriment of human health and environment.[107] Such subsidies are a significant fiscal burden on many countries. For example, India budgeted around US$ 22.7 billion on fertiliser subsidy in 2023/24.[108]

Many of the very substantial investments and financial incentives aimed at improving conditions in the agricultural sector are directed towards intensive production systems. Directing more of these resources towards agroecological systems could achieve "better ecological, economic and social outcome".[109] However, it is not only the governments of cotton producing countries that are misdirecting subsidies. Scarcely any of the multilateral funding provided by western states for agricultural projects in partner countries seek to reduce dependence on hazardous chemical inputs. An analysis of EU funding to FAO, World Food Programme and International Fund for Agricultural Development found that between 2016 and 2018, just 2.7% went to projects supporting substitution of harmful inputs, while 80% of funding was funnelled to projects supporting conventional agriculture.[110]

> **WHILE SEVERAL VOLUNTARY STANDARDS HAVE BEEN WORKING TOWARDS EITHER A PHASE-OUT OR BAN OF HHPS, NATIONAL REGULATION IS KEY TO PROHIBITING A PESTICIDE AT THE NATIONAL LEVEL. GOVERNMENTS IN PRODUCING COUNTRIES MUST USE THEIR REGULATORY ROLE TO TACKLE EXPOSURE TO HHPS.**

It was hoped that bills in the EU would help further regulate the export of pesticides that are banned in Europe, closing wide scale use of loopholes within current EU legislation by agrochemical giants, in order to continue the export of prohibited pesticides to developing countries outside of Europe.[111, 112] France and Belgium have already prohibited the export of pesticides that are prohibited in the EU, but an EU-wide regulation has not been agreed on.[113] With recent changes in the priorities of the EU, such a regulation seems like an unlikely prospect in the near future.

Cotton sector stakeholders have a significant responsibility to ensure global commitments on reducing pesticide harm are met.

Chapter 6

RECOMMENDATIONS

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Brands and retailers

Your customers care about sustainability and fairness, and they're counting on you to change your behaviour today - not in five years' time. When it comes to the cotton value chain, you have the greatest share of money and influence and it's your duty to be a driving force for good.

Take responsibility for your value chain by investing in producers:

- Go beyond just purchasing 100% of cotton from certified sources and invest in supporting producers.
- Take responsibility for improving sustainability in your value chain and partner with farmers to improve the conditions under which your products are grown and made.

Improve purchasing practices:

- Enable long-term contracts for producers with a sufficiently high farm gate price to afford a living income.
- Spread payments throughout the year, creating more reliable cash flows for smallholder households.
- Be transparent about your purchasing practices and progress on improvement plans, including impact data and farm gate prices.

Raise the bar on transparency:

- Embrace due diligence; know exactly where your cotton comes from, be publicly transparent about it, and ensure you are paying suppliers sufficiently to facilitate traceability.
- Demand proof that a living income and wage will be received by producers and workers as a prerequisite for commercial arrangements.
- Focus on having an impact on farmer poverty, decent work and environmental improvements, and expect your partners to be able to prove their impact.
- Improve the data literacy of your teams, and only make honest and verifiable marketing claims.
- Help consumers understand the sustainability challenges in your supply chain, and the need to act on them.

Respond constructively in cases of forced/child labour:

- When you learn of instances of forced or child labour, or other infractions, be transparent about it, remove the material from the value chain, and responsibly engage with suppliers to ensure it does not happen again. Only if your efforts fail, then disengage.

Support Standards to add more value:

- Standard systems are playing a crucial role to address some of the worst harms in cotton production, so it is crucial that companies do not see them as partners to only support due diligence or regulatory compliance. Retailers and brands should encourage them to raise their ambition, prove their impact, and involve farmers even more.
- Work with standards that lead to a measurable price premium, responsible purchasing practices, and a living income for smallholder cotton farmers.

Proactively engage with Multi-Stakeholder Initiatives (MSIs):

- MSIs can play a critical role in providing forums and interventions to address issues in the cotton value chain. Engage with MSIs that bring smallholder farmers and workers to the table in a meaningful way, and enhance partnerships with producer organisations to support and enable genuine participation.
- Use MSI forums to push for long-term solutions, including value distribution mechanisms, regenerative agricultural practices, and supporting diversification as a strategy for avoiding overproduction and its consequences.

Governments in predominantly consuming countries

Standards, CSOs, and responsible companies have stepped-in to compensate for government failure to regulate irresponsible practices, but this is not sufficient. Now some authorities have begun to take appropriate steps (such as CSDDD and FLR), we want to see all governments and regulators around the world take the necessary legislative, regulatory, and supportive action.

- Adopt or enhance due diligence legislation that can lead to a positive impact for smallholder farmers, including requiring companies to take responsibility for their full value chain.
- Ensure all relevant legislation and regulations explicitly include the right to a living income and wage, fair and safe working conditions, and access to robust redress schemes.
- Ensure competition law does not prevent market players from working together on pricing to ensure a living income for smallholder farmers.
- Introduce or enhance measures, including changes in subsidies, to support a managed transition away from synthetic agrochemicals towards the safe use of agroecological alternatives such as biopesticides and organic amendments.
- Model good purchasing practices by sourcing your own cotton products from certified sources.

Governments in predominantly producing countries

We want all producing nations to support a living wage and income, and fair conditions for cotton farmers and workers, as well as enable sustainable production that supports our planet, climate, and communities.

- Consider price support mechanisms to support a living income for smallholder cotton farmers, and reward cotton that is grown more sustainably.
- Regulate agrochemicals to eliminate Highly Hazardous Pesticides, and promote use of safer alternatives such as biopesticides and agroecological practices.
- Support farmer organisations to establish greater collective bargaining power and influence in the value chain.
- Redirect agricultural investment in research, capacity building to support agroecology and achieve ecological, social and economic sustainability.
- Facilitate international retailers and brands in connecting with smallholder farmers.

Farmers and farmer support organisations

Farmers, especially smallholders who are producing the majority of the world's cotton, are critical to the sector. Farmers deserve a healthy environment, a greater share of the cotton sector's value, and support to adapt to future challenges. Please consider:

- Switching from conventional cotton farming to more environmentally friendly and regenerative agricultural practices. It can improve your health, your soil, reduce production costs, and diversify your income.
- Joining, or setting up, a producer organisation to market your cotton collectively and add value through traceability services or processing other crops. Farmers who are members of producer organisations are overall more positive about their prosperity prospects than non-members.[114]

- Training farmers and workers on more environmentally friendly and socially responsible farming practices. Including safe working conditions for labour, etc.

MSIs

To further their critical role in providing forums and interventions to address issues in the cotton value chain, Multi-Stakeholder Initiatives (MSIs) need legitimacy through involving farmers, to drive more ambitious long-term solutions, and to communicate openly their impacts and challenges.

- Drive companies to go further in ensuring cotton provides farmers with good livelihoods and is environmentally sustainable. Companies buying 100% of their cotton from certified sources is the bare minimum.
- Sustainable production and consumption is essential for our environment, climate, and for the livelihoods of farmers and their communities. MSIs have a role to play specifically in promoting regenerative agricultural practices and crop diversification which can support climate change adaptation, mitigation, and farmer resiliency.
- Require your members to adopt responsible purchasing practices and to be transparent.

These recommendations were made with the intention of supporting efforts to tackle the inequities faced by cotton producers. The authors do not presume to offer an exhaustive or final checklist as regards tackling these issues. For further insight on the topic of Forced Labour in global supply chains and means of addressing this particular issue, we recommend the OECD's report "Ending child labour, forced labour and human trafficking in global supply chains."

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