GENEVA CENTER FOR **BUSINESS** & **HUMAN RIGHTS**



Enhancing Supply Chain Resilience by Integrating Human Rights: Post-pandemic Insights from the Agriculture Sector in India

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"Enhancing Supply Chain Resilience by Integrating Human Rights" is a research project conceptualized in multiple modules. This report summarizes our insights from module 1, which was co-initiated and supported by Nestle SA. The present report expresses the views of the authors only, and should not be considered as endorsed by Nestlé SA in any manner.

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The Geneva Center for Business and Human Rights (GCBHR) was founded in 2019 as the first business and human rights center at a business school in Europe. The GCBHR educates future business leaders and supports companies in developing business models that align profits and human rights principles. The GCBHR is allied with the NYU Stern Center for Business and Human Rights.

EXECUTIVE SUMMARY

COVID-19 as put international food supply chains to the test and it has increased the urgency for creating sustainable food systems. The UN convened the first Food Systems Summit in September 2021 highlighted the need for bold action to 'transform the way the world produces, consumes and thinks about food'.¹

Ensuring the resilience of agriculture supply chains is a key element in this transformation. For this reason, the UN Food Systems Summit prioritized questions of livelihoods that are the foundation for sustainable food systems. It also highlighted the powerful role that large food and beverage companies can play in leading a transformation process that provides a vector for a positive recovery.²

In this context we study the impact of the pandemic on the human rights situation in India's agriculture supply chains. India is among the top ten global exporters of agriculture products that are consumed daily around the world³ and the country plays a pivotal role in the supply chains of global food and beverage companies. We focus our research on coffee and sugarcane supply chains, representing commodities that are both, directly consumer-facing (coffee), and primarily used in B2B supply chains (sugarcane). In rural areas, nearly 70% of the Indian population depend on the agriculture sector as their main source of income.⁴ Smallholder farmers are a cornerstone of India's agriculture industry and their livelihoods are particularly vulnerable to external shocks like the pandemic.⁵

After a strict lockdown to contain COVID-19 in the beginning of the pandemic, the Indian government lifted restrictions in June 2020. Cases peaked in September 2020 but surged again in a severe second wave from March - June 2021 and brought the health system to its limits.⁶ Classified as an essential services sector, activities in the agriculture supply chain could continue without major interruptions throughout the pandemic.⁷ In our research we learnt that agriculture supply chains were largely able to adapt to the changing circumstances and uphold demand and supply, e.g., by adopting health protocols or limiting the workforce per shift. However, the industry has faced challenges concerning the restricted availability of transportation and shortage of labor. This led to delays and rising costs throughout the supply chain and has put cash flow and wage payments at risk.

The pandemic prompts leading firms in global agriculture supply chains to critically review sourcing practices and their impacts on human rights. As field visits were largely suspended during the pandemic, international food and beverage companies had fewer insights into the human rights conditions on farms and plantations. Key questions they posed include, e.g.: Did cases of child labor increase when schools were closed? Were labor laws, including working hours, adhered to in the face of labor shortages? Was food security ensured? Were health and safety measures sufficient to prevent infections and provide medical assistance when needed?

We conducted over thirty interviews with company representatives from different stages in the supply chain and with industry experts with diverse backgrounds, including civil society and academia. The interviews took place over the course of nine months in 2021, allowing us to collect insights both before and after the second critical wave of COVID-19 in India. The aim of this first phase of our research was to assess the impact of COVID-19 on human rights and to recommend to leading food and beverage companies how to mitigate systemic human rights risks.

Our study puts forward the following key insights:

- It sheds light on the distribution of risks for different actors in the supply chain. Risks accumulate at the farm-level and to mitigate these risks, the farms' needs for livelihoods must become the focal reference point for determining interventions that enhance resilience. For example, some farmers reported that while they are unable to sustain livelihoods from cultivating coffee beans alone, they are able to compensate with other crops. This suggests that to enhance resilience, the farms' needs must be analyzed as a comprehensive unit.
- It highlights what resources are effective in mitigating negative impacts. For example, farmers that participate in a company's sustainability program were able to access additional support and resources.
- It provides indications what type of actions provide effective relief (e.g., the support of local companies within communities).
- Our research highlights that companies have limited insights and leverage to address systemic human rights issues if they focus on their own supply chain alone. Instead, collaborations across the supply chain and also with other industry players that operate in the same region to share responsibility would be beneficial. Interview partners indicated to us that they would be very interested in such cross-sectoral partnerships and collaborations between local suppliers and global brands.

We conclude with an action plan outlining five concrete steps that leading companies in global agriculture supply chains should undertake to make their human rights engagement resilient to shocks.

- First, we suggest that companies conduct urgent action human rights due diligence. When external shocks like the pandemic affect supply chains, supply chain actors need to pool knowledge and resources to assess the most immediate needs on the farm-level.
- Second, companies need to not only consider immediate but also mediumterm human rights challenges as they define support strategies. Their reference point must be risks to livelihoods at the farm-level.
- Third, to advance systemic change, companies must collaborate with supply chain actors across the entire supply chain: vertically (from within their own supply chain) and horizontally (across the industry), including commodity traders that often have direct relationships with farmers.
- Fourth, companies should adapt their responses to the regional context because challenges differ significantly depending on regional supply chain structures. Joining forces at the regional level facilitates addressing systemic human rights risks.
- Finally, we suggest that companies treat farms as a unit to ensure livelihoods and business sustainability. Considering the accumulating volatility in farmers' income, companies should consider options to double down their economic support.

The pandemic has raised the stakes and expectations of food systems transformation. The time to re-invent global food supply chains to ensure social and economic resilience is now.

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1. INTRODUCTION

Sustainable Business Requires Addressing Human Rights Risks

Supply chains are only as strong as their weakest links. Workers in the deepest layers have often been hit the hardest by the implications of the pandemic.⁸ Yet, their contributions to global value chains are essential and therefore, their protection is key to ensure supply chain resilience. The COVID-19 pandemic has posed significant challenges for companies and workers in global supply chains. Companies seeking to create sustainable business models, especially those relying on production in global supply chains, need to develop approaches that ensure both resilience and respect for human rights.⁹

In many places around the world, private actors, such as businesses and civil society organizations have supported governments and provided immediate relief by stepping in to mitigate and alleviate the effects of the pandemic; they first focused on the health dimension, and then on the social and economic impacts. The pandemic has shown that established human rights due diligence systems are often inadequate for addressing the fast-evolving human rights challenges for workers. While companies can build on established relationships in the supply chain to alleviate some challenges, other human rights risks have been amplified during the crisis.

Companies need to uncover blind spots to effectively address not only immanent impact and business risks but also medium- and longer-term human rights implications of the pandemic. As COVID-19 accelerates the need for corporate transformations, ranging from digitalization to an increased awareness for long-term impact and sustainability, it is time to re-evaluate the effectiveness of human rights protection along global supply chains.

Systemic Effects for Supply Chain Resilience

The COVID-19 pandemic has challenged human rights progress in key areas such as food security and poverty. The crisis has highlighted the need for more sustainable business models that comprise both social and environmental dimensions. This comprehensive understanding of sustainability is gaining traction among corporate leaders.¹⁰

As companies are actively responding to immediate needs, it is important to also consider the medium- to longer-term effects. Sole concern for individual human rights is insufficient to address the scope of the effects in a global interconnected supply chain. Rather, a systemic view is needed to ensure supply chain resilience for future crises.¹¹ Drivers of the crisis, substantial structural effects, and shortcomings of current measures need to be identified and addressed.

Research Focus

This research project focuses on the agriculture industry. Agriculture supply chains were considered essential during COVID-19 and they were prioritized to avoid disruptions. To uphold supply and ensure food security, growing and harvesting on the farm-level, processing and packaging, and distribution continued.

Yet, different stages in the value chain faced logistical and practical challenges. For instance, new hygiene and distancing concepts affected the allowed on-site capacity at processing plants in the supply chain. Lockdowns and restricted mobility affected local and cross-border transportation. Also, direct health risks and measures to restrain the pandemic affected the farm workers and workers at processing plants.

The present research focuses on India, a country that was affected severely by the crisis. The Indian agricultural sector is of high economic relevance, with over 40% of the workforce working in agriculture as of 2019.¹² The study investigates two different commodities that represent supply chains that are economically highly relevant – sugarcane and coffee. India ranks among the top ten largest coffee producing and exporting countries and thus plays an important role in global coffee supply chains.¹³ For sugarcane, India is the second largest producer after Brazil¹⁴ and accounts for nearly one fifth of the global supply, and it is the largest consumer of sugar.¹⁵ From a human rights perspective, both coffee and sugarcane are globally considered high risk commodities that merit particular attention to the protection of the rights of vulnerable groups in the supply chain.¹⁶

In the wake of the COVID-19 crisis, quick reactions from companies and exceptional interventions from governments can help absorb the immanent impacts of the pandemic. For medium- and longer-term impacts, however, companies committed to human rights due diligence need to re-assess and monitor the effectiveness of measures continuously. This study will shed light on the specific human rights challenges by analyzing the impact of corporate responses concerning human rights risks for vulnerable worker groups during the pandemic, including migrant workers and workers in the informal sector.

The aim of the research is to identify opportunities for corporate actors to mitigate proactively and collaboratively new or amplified human rights risks, which is a crucial step toward enhancing supply chain resilience.

2. RESEARCH CONTEXT

THE STRUCTURE OF THE AGRICULTURE INDUSTRY IN INDIA

Industry Overview and the Situation of Human Rights

The agriculture industry contributes significantly to India's GDP, accounting for almost 20% in 2020-2021.¹⁷ It creates over 40% of the country's employment. In rural areas, over 70% of households rely on agriculture for their livelihoods.¹⁸ The large majority of farmers are smallholders, meaning they own less than 2.0 hectares of land.¹⁹ This is significantly less than medium estates, which allow accommodating more workers on-site. Small and large farms differ in workforce composition (e.g. permanent to non-permanent worker ratio) and living situations for farmers.

Typical human rights risks for farm workers relate to health and safety concerns and labor exploitation. Key labor rights risks to be aware of are child labor, human trafficking, excessive hours coupled with low wages, and access to water and sanitation. Indirect risks relate to workers' livelihoods and the lack of alternative work. Poverty is associated with human rights risks and long-term consequences, not least for the development of children. Poverty-related human rights risks include concerns over food security, affordability of adequate housing and school fees.

Globally, the agriculture industry relies heavily on informal workers and migrant labor.²⁰ In India, the proportion of informal workers in the industry is estimated to be as high as 90%.²¹ Depending on the commodity and region, the harvest season is often supported by migrant workers, mostly moving from Eastern to Western regions, many of whom are travelling with their children. Also, children contributing to farm work are reported to be a latent concern in India, despite the lack of specific numbers.²²

Migrant workers and informal workers are considered particularly vulnerable in terms of human rights risks compared to permanent workers who live on farms or in communities nearby.²³ Reasons for these heightened human rights risks for migrant workers include socio-demographic factors (e.g., lower levels of education and literacy), administrative factors (e.g., a lack of ID and access to social security schemes), and economic and work-related factors (e.g., daily wage labor, reliance on labor contractors, temporary accommodation).²⁴

Supply Chain Resilience and Sustainability

Supply chain resilience is defined as "the ability to proactively plan and design the Supply Chain network for anticipating unexpected disruptive (negative) events, respond adaptively to disruptions while maintaining control over structure and function and transcending to a post-event robust state of operations, if possible, more favorable than the one prior to the event".²⁵ This research transfers this view to a human rights perspective. It focuses on how corporate sustainability programs managed to protect workers during the crisis, and mitigated risks for drawbacks to human rights standards.

The agriculture industry generally faces several challenges that weaken the resilience of supply chains, and India is no exception. As produce is publicly traded, fluctuations in market prices for farmers are inevitable. A farmer's bargaining power is further reduced due to the consolidation of food value chains. Furthermore, the industry is sensitive to other external shocks, such as pests and plant diseases and weather conditions. These challenges are compounded by climate change. Soil degradation, deviations from typical seasonal patterns of rain, extreme heat and droughts are just a few impacts that are already visible.²⁶ Accordingly, the livelihoods of farmers are a constant concern.²⁷ Making agriculture profitable is a key task for this highly subsidized industry.

Increasing price pressure, coupled with the impacts of climate change, make work in agriculture less attractive. India experienced a number of suicides among farmers, protest over farm law reforms, and concerns for the future of farms as the younger generation turns to different jobs.²⁸ The Indian government has supported farmers with subsidies or a regulated minimum support price (MSP); however, reforms of these regulations have long been expected and are currently being negotiated.²⁹

The pandemic coincided with announcements of Farm Bill Amendments through the government. In response, protests from farmers erupted in several parts of India. Sugarcane farmers, too, particularly from the Northern growing regions in Uttar Pradesh and Punjab, left their farms and traveled to the capital New Delhi to voice their demands for a higher MSP.³⁰ After over a year, the planned amendments were first deferred and later abandoned.³¹

As of 2013, Corporate Social Responsibility (CSR) activities are mandatory for large companies in India, both public and private. The requirements include spending on average 2% of the net income on CSR in India and establishing a committee on the board level.³² Throughout the pandemic, Indian companies contributed substantially to the country's COVID-19 relief.³³

Mapping the Leverage Along the Stages of the Supply Chain

Lead firms support agriculture innovation to make the work of farmers more attractive and profitable. The diversification of crops, adoption of new farming methods, or investment in machinery can help mitigate the challenges but are not always an option. In many global supply chains, sustainability programs in producing countries are standard, yet the scope and focus of these programs can vary substantially. In the 2020 Know the Chain benchmark report for the food and beverage sector, the highest score that any company achieved was 65/100. While most of these companies have standards and guidelines in place, the lack of transparency and information on the effectiveness of sustainability programs are valid concerns that need to be addressed.³⁴

For assessing the intersection between human rights risks and supply chain resilience, the size of farms and the type of cultivation also play a role. Smallholder farmers have fewer means for investments or compensation than farmers and owners of larger plantations. Any external shocks will hit smallholder farmers harder. Slightly better protected are farms that are part of certification schemes or sustainability programs of larger buyers because they can benefit from price premiums, preferential buying conditions, or regular training and support.

Global brands are faced with two main challenges: scaling sustainability programs to reach more farms in a region and increasing transparency and traceability across all supply chains. Suppliers typically work with several hundred farms or more. Currently, according to our interviews, only 5-10% of them contribute to the supply chains of global brands. Furthermore, only a limited amount of production is certified and sustainable. These points highlight the exigency for corporations to assess leverage in both qualitative and quantitative terms.

COFFEE PRODUCTION AND HUMAN RIGHTS ISSUES

Overview of the Coffee Sector in India

Globally, India is among the top ten coffee growing and exporting countries.³⁵ India grows both Robusta and Arabica coffee. Most of the coffee is grown in the Southern states of Karnataka, Kerala, and Tamil Nadu, with Karnataka alone accounting for more than 70% and employing over 80% of coffee workers in India.³⁶ Coffee plantations are for the large majority (over 90-95%) cultivated by marginal and smallholder farmers of less than 10 hectares.³⁷ In India, all coffee is shade-grown under trees.³⁸ It is common to grow additional crops alongside with coffee, such as spices like pepper and cardamom, or fruits. Farmers also trade in lumber from trees to diversify their income.³⁹

Coffee, as a soft commodity, is traded on different stock exchanges. Market prices for coffee are volatile and have remained low for several years in a row but have shown an upward trend since the second half of 2020.⁴⁰ Some farmers who are part of certification schemes receive a premium for their coffee; however, they also bear the cost of the certification process unless suppliers agree to cover them.

Most workers in India's coffee sector are employed (rather than own account workers), and over 80% earn the minimum wage. There is no national minimum wage across India, but a non-binding national floor of IRN 176 was introduced in 2017⁴¹, though it remains below the country's average.⁴² Earning a living wage remains a concern. The wages for workers present a large part of expenses in coffee production, and from the market prices that stagnated at low levels for years, the proportion of retail prices that reaches farmers is low.⁴³

Overview of the Coffee Supply Chain



Stages in the Coffee supply chain

The harvest season takes place between January - March for Robusta, and from December - January for Arabica coffee. Typically, the on-farm activities include the growing, picking, drying, and cleaning of coffee, whereas the hulling and grading in most cases take place further downstream in the supply chain.

Coffee is grown on smallholder farms or slightly larger coffee estates. It then moves to local suppliers at curing works that are typically located in the same area, where the coffee is processed and sorted to obtain green coffee. The green coffee is procured by main traders, who often export and sell the coffee to brands. The final refinement is done by the main traders or specialized roasteries that create the brand-specific blends, that ultimately reach the consumers.

The specific supply chains of different brands rarely overlap in practice, although the farmers can sell their coffee to multiple buyers. Depending on the procurement model, the stages and number of layers of the supply chain can vary significantly. Global supply chains tend to consolidate strongly at the level of traders. Traders work with several hundred or even thousands of farmers in each country, whereas some brands work only with a few dozen main traders globally. Between every stage of the supply chain, it is possible that one or more layers of sub-traders and middlemen are added.

Different sourcing and procurement models can co-exist. Some processing plants and traders also own plantations and will first buy a fraction of the produce for themselves and market it directly, and trade the remainder, e.g., with global brands. Similarly, brands have different procurement models that can include a mix of sourcing through main traders, sub-traders, and direct sourcing from farmers. Some supply chains work mostly with smallholders, while other brands choose to source primarily from medium and large estates. Brands' supply chains can include both certified and conventional coffee farms.

A number of industry associations and non-profit certification schemes exist for promoting sustainable coffee. Moreover, global brands organize their own sustainability programs on the farm-level that are run with the support of independent agronomists.

Human Rights Challenges in the Coffee Sector

In the coffee sector, the dominant issue is livelihoods and living income. Coffee prices are determined on the global market and have been low for many years. The effects of climate change are a real challenge for farmers, e.g., by influencing the timing of the rain, soil quality, and crop diseases.

For workers, in addition to the living income, other potential labor rights risks in coffee producing include health and safety concerns related to activities on the plantations, e.g., the application of chemicals or the encounter of poisonous or wild animals.

Labor exploitation remains a more latent risk in the coffee sector. The government has introduced laws that require employers to pay for social security benefits for their workers and aim to empower workers.⁴⁴ At the same time, due to the lack of alternatives for workers, it is estimated that forms of bonded labor exist. The risks involve working overtime at wages below minimum wage rates, and malnutrition. Migrant workers are particularly vulnerable to fall into conditions that resemble those of bonded labor.⁴⁵

As the likelihood of human rights risks also depends on the employment model, the risks need to be differentiated on a case-by-case basis. A variety of industry standards and governance mechanisms aims to address social and sustainability concerns. A lack of transparency and accountability, however, restricts their impact on making a difference in addressing the root causes of labor rights risks.⁴⁶

Leverage of Stakeholders to Address Human Rights and Resilience

On the farm-level, longer-term relationships between brands and farms can be mutually beneficial and support farmers' livelihoods. Local traders and representatives from global brands indicated in our interviews that farmers are very independent, and implementing changes to farming practices can be a lengthy process. According to a corporate sustainability representative, "each time it took five years... and it's still a struggle sometimes that it's not like you can do whatever; the farmer decides." Nonetheless, according to a coffee farmer in Karnataka, "the price premiums for certified produce help but *are not enough to make farming profitable.*" Global brands are aware of this and have confirmed that premiums rather serve the purpose of cultivating long-term relationships.

- In the interviews, local suppliers were highlighted as critical for advancing transparency. Suppliers are key actors in establishing sustainability and resilience, as they attest to certification standards and create traceability to the farm-level. Each layer in a supply chain can lead to a loss in traceability, and when brands therefore tend to consolidate supply chains, suppliers can become strategic partners and gain significant leverage. Such a process must be inclusive and based on building trust. As one representative of a corporate sustainability program noted, middlemen might be reluctant to share information on their sourcing network "because socially [they] feel afraid that if you tell the big suppliers, the suppliers will take [them] out and buy from someone else".
- Main traders play a major role in supply chains of global buyers. While the interviews suggest that global buyers are informed about the supplying farms and have some traceability beyond their tier-1 suppliers, there is no guarantee that all supply can be traced back to its specific farm of origin. For medium to larger estates, a corporate representative said that coffee farmers are perceived as partners who have sufficient technical and economic expertise, as well as financial resources to invest in innovation of farming methods to adapt for climate change, increase productivity, or efficiency. In smaller farms, engagement is focused more on training on good agriculture and sustainability practices.
- Global brands interact with the farm-level through several distinct links. First, the management of procurement relationships and of sustainability engagement are more separated in different departments. Second, annual audits and evaluations are conducted by independent third-party auditors. Third, sustainability programs focus on ongoing training and awareness campaigns. Such programs are associated with global trading companies or brands and are typically realized through working with independent agronomists. The agronomists review labor conditions, including accommodation and sanitation facilities, and facilitate access to services, such as health check-ups for workers and government insurance schemes. Overall, transparency and relationship-building are deemed more crucial for India in comparison to other coffee growing regions. An interview partner who works on the sustainability program of a major food and beverages company described that one needs to "be humble about that in India, [the] role is not a big transformation like in Colombia or in Africa or Indonesia". Referring to the greatest challenge in India, the interview partner stated that "I'm trying to simplify a 5-6-year journey here, and the word which stood out for me was transparency".
- A number of corporate and industry initiatives address the challenges in the coffee sector. Most of them emphasize technical or ecological aspects in order to increase productivity and make farming more profitable, whereas social aspects are treated much more indirectly.⁴⁷ Widely adopted initiatives include, e.g., the 4C Code of Conduct, Fair Trade, and the Rainforest Alliance & UTZ standard. Ensuring a living income is a structural challenge and remains a key concern that requires joint action of different actors in the coffee supply chain.

SUGARCANE PRODUCTION AND HUMAN RIGHTS ISSUES

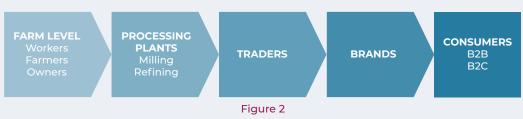
Overview of the Sugarcane Sector in India

Sugar can be processed from sugarcane and sugar beets; 80% of the global sugar supply comes from sugarcane.⁴⁸ With an annual production of around 30 million tons of sugar, India is the second largest producer after Brazil, supporting approximately 40 million farmers and families.⁴⁹ Sugarcane is primarily cultivated in two regions in India; more than half of the supply is grown in the subtropical North (mostly in Uttar Pradesh, and to some extent in the neighboring states Punjab, Haryana, and Bihar) and nearly one quarter of the supply comes from the tropical West (mainly Maharashtra, and Gujarat), and an additional 10% come from states in the South (Karnataka, Tamil Nadu, and Andhra Pradesh).⁵⁰ In these states, sugarcane cultivation is estimated to directly or indirectly support 12% of the rural population.⁵¹ There are more than 500 mills, of which a significant part is maintained by cooperatives of farmers (with regional differences).⁵²

Sugarcane is cultivated both on large farms and by smallholders, mostly as a monocrop.⁵³ For marginal farmers, sugarcane accounts for a larger part of their income, and smallholder farmers depend almost solely on sugarcane for their livelihoods.⁵⁴ Sugar mills are a key player in the supply chain. The dependency of farmers on mills has led to complaints about irregularities at the point of weighing the supplied cane and about overdue payments.⁵⁵ Delays in payments from mills to farmers are common and farmers normally bridge these delays by selling part of their produce in local markets.⁵⁶ Given the low international market prices for sugar and high production costs in India, excess production and little incentive for exporting (unless subsidized) are two primary reasons that led mills to defer payments for several months.⁵⁷ Also, labor shortages and droughts have impacted the profitability of the sector.⁵⁸ The COVID-19 crisis brought the struggle of maintaining profitability in the sugar sector to the fore.

Sugarcane is an efficient crop with high yields, but the cultivation of sugarcane has significant impact on the environment.⁵⁹ Key concerns include the amount of water that is required, and emissions from burning the fields prior to harvest.⁶⁰ Climate change further adds to the expenses for farmers. Increasing the share of sugar beets could be an alternative.⁶¹ Some state governments like those in Punjab and Karnataka turned to promoting the growing of sugar beets.⁶² Diversifying or changing the production on a larger scale, however, would require the support of the sugar lobby.⁶³

Sugarcane in India is highly politicized. The production is organized around strict forecasting and pricing procedures. Cane societies estimate quotas and hand out respective supply tickets to farmers, so that mills can plan their capacity and farmers can know how much cane to sell.⁶⁴ Also, at the beginning of the harvesting season, the government determines the minimum support price (MSP) for the season, which denotes the price that mills must pay to buy sugarcane.⁶⁵ In order to secure farmers' income, mills are further legally required to accept and process all sugarcane within their district. Sugarcane is increasingly processed to generate ethanol and supports India's energy sector in the transition away from fossil fuels.⁶⁶



Overview of the Sugarcane Supply Chaim in India

Stages in the Sugarcane supply chain

The growing cycle for sugarcane ranges from 12 months (in the subtropical regions) to 18 months (in the tropical regions). Harvesting typically starts in October (in the North) or December (in the West and in the South) and lasts until April. To date, only 5-10% of the sugarcane production in India is mechanized and most activities, including harvesting, are done in manual labor.⁶⁷ The sugarcane sector relies strongly on migrant workers who stay on the farms for five months.

Smallholders sell the sugarcane to mills, either directly or through middlemen. At the mills, the sugarcane is weighed and graded, crushed, and further processed into raw sugar or other products, e.g., into ethanol. Delivery times between the cutting of the cane on the farms and the further processing at the mills are critical for the value of the sugarcane. These cut-to-crush times should not exceed 24 hours in order to avoid that the cane dries out and loses value. Farms thus follow strict schedules for cutting the sugarcane, in close coordination with mills.

Sugar mills are the central entities in the sugarcane supply chains in India. Mills are assigned to designated command area, and farms within the zones are required to sell to the associated mill. Mills in turn have an incentive to support farmers in the area and provide extension services to farms. Such services can include agricultural expertise and training as well as practical support in organizing inputs and transportation. In terms of ownership structure, both private mills and mills that are run by cooperatives are common.

Global brands procure raw sugar from mills. Mills are also the primary contact for brands with regard to implementing sustainability programs. Out of over 500 sugar mills in India, only around 10% are currently estimated to operate at the standard that global brands require, according to interviews with responsible sourcing managers. The leading certification standard for sustainable sugarcane production is Bonsucro. The multi-stakeholder association focuses on certifications as well as on providing a platform that engages with mills and farms in the process of implementing social and environmental sustainability.

Human Rights Challenges in the Sugarcane Sector

Human rights risks in the sugarcane sector include health and safety concerns in relation to activities on the plantations, such as physical harm from hazardous work with sharp tools, carrying heavy loads, and high exposure to sun, heat, pesticides, and emissions from the smoke of burning the fields, and to insects and snakes. Working hours are typically very long, reportedly reaching 14-18 or more hours.⁶⁸ Hygiene and sanitation standards, access to fresh water and electricity are not always guaranteed in remote locations. Temporary accommodations, at times constructed in the fields, are common.⁶⁹ Also, ensuring adequate nutrition can be a concern.⁷⁰ Another concern focuses on workers' livelihoods, e.g., in relation to low wage levels and delayed payments.⁷¹ Most workers are migrants and informal workers, who have limited access to social security and welfare schemes. These workers are at increased risk of labor exploitation and indebtedness if they incur unexpected expenses, e.g., from injuries or absences at work which cause deductions from wages. Many are employed through labor contractors and sub-contractors that can obscure the employer. Fees paid to labor contractors (often without a written contract) reduce the remaining income for workers, increasing their risk of poverty and indebtedness.⁷² Depending on the type of contract, workers who perform the same activities can receive significantly different wages.⁷³ There is a gender disparity in wages with women earning less than men and do not receive the same minimum benefits.⁷⁴

Many of the human rights concerns in the sugarcane sector are systemic and relate to socio-cultural practices and economic constraints at the grassroot level. Factors that contribute to circumstances of debt bondage include a "[I]ack of employment opportunities in their native villages, infertile agricultural land, political conflict over land and water, combined with the deeply rooted institute of caste system and gender inequality".⁷⁵ Migrant workers and women appear to be particularly vulnerable. Migrant workers are typically hired in pairs of husband and wives, and hiring practices place women at a structural disadvantage. Children travel with their parents and take on supportive tasks for the family.⁷⁶ Specific numbers are lacking, but a high likelihood of forms of child labor to occur is a widely shared concern.⁷⁷ Different stakeholders started to address human rights in the sugarcane sector, yet progress is slow.

Leverage of Stakeholders to Address Human Rights and Resilience

- Farm-level. One obstacle to implementing and monitoring sustainability standards is the structure of the sugarcane sector. Most farms are very small and thus, the sheer number of farmers in the supply chain is a challenge. Many of them are poor and marginalized, and *"sustainable production standards are far-fetched for farmers,"* according to a responsible sourcing representative from a global brand. This was confirmed across interviews with representatives from different food and beverages companies and with an expert organization that also operates in India. Representatives from an expert organization, seeking to implement higher sustainability standards in the sugarcane sector, noted that resilience depends on the creation of alternative opportunities for farmers, such as through diversification of crops, or indirectly, through education for their children. A responsible sourcing manager from a global buyer summarized that *"farming communities know what they should do, they just don't have the means"*.
- Mills and local suppliers. According to our interviews, the relationships between buyers and mills are cooperative but fragile. The buyers choose which mills to source from carefully and thus, the standards are usually high compared to the industry average. Yet, while occasional field visits take place, there are no regular social audits and the majority of mills does not follow any standardized certification schemes. An interview partner explained that when planning assessments on the ground, "*mills stopped responding when business is bad*" and rather referred to their own programs that were already in place and matched the brands' required standards. Thus, currently, engagement relies on trust and aims at continuous improvement; however, to "*really understand*, *you have to go down to the farm-level.*" Representatives from different brands noted that the lack of data is a main challenge. Mills are reluctant to share

information, and farmers, particularly in remote areas, do not keep accurate bookkeeping records of their operations.

- Cane extension teams and agronomists. Global brands reported that they have good relationships with their tier-1 suppliers (in this case the sugarcane mills) but find it difficult to increase transparency in deeper layers of the supply chains. One representative from a large food and beverages company noted that "[in India], we haven't done anything because it's a super challenging market. All the franchising is done locally. What we did so far is that we engage the suppliers, that is the mills. So, we have the mills and we have done this base risk assessment environment, but we haven't been on the ground yet." The mills take charge in ensuring the expected quality and sustainability standards. Their cane extension teams maintain communication with the farmers, organize the harvesting, and transport the cane.
- Global brands. With regards to human rights risks, a representative from a global brand stated that "it is overwhelming: we would probably find everything; living conditions for the cane cutters, women rights, children rights, land titles, irrigation, and nutrition." Evidence from a study that was commissioned by another global buyer supports this statement. Labor standards, child labor, and the wide use of pesticides have been emphasized as urgent risks. In addition to buying from certified suppliers, global buyers emphasize the need for collaboration and synchronized action to increase the bargaining power and get closer to the ground step-by-step. Currently, interview partners from different global brands confirmed that the quality standards demanded by buyers from mills are company-specific, albeit similar.
- Expert organizations and industry initiatives. A representative from a standard-setting and certification body for sugar noted that "there is a complete lack of data in rural areas" and that "farmers are not in a position to take records [of their accounting]; ... profit also is an approximation." Mills who cooperate with this standard-setting organization have collected data, but progress is slow. Also, sustainability training "depends on what companies want to work on" and is largely determined by mills. One expert organization that works to promote sustainable sugarcane production mentioned that it tried to reach out to people beyond the mills, such as farmers and communities, but was met with limited success. Also, at the time of the interview, it listed few mills in their program and yet fewer that received (and aimed for) certification, and conceded that even globally, their work is to date "a drop in the ocean."
 - In the view of both corporate actors and expert organizations, companies try to elicit sustainable business practices through industry collaboration, yet concrete initiatives are still lacking. Global brands found that a focus on the economic dimension of sustainability initiatives can open the door to joint action along the supply chain. An interview partner who works on the implementation of sustainability programs noted that "you need to cultivate an interest in that there is another way." A different global brand follows a similar argumentation, suggesting to "map if there are overlaps in sourcing regions with multiple categories ... and then go into that landscape. Farmers are poor whatever they grow, and their issues are the same."

THE IMPACT OF THE COVID-19 PANDEMIC IN INDIA

The Pandemic in India:

A Strict Lockdown in the First Wave and a Fast Spread in the Second Wave

During the first year of the pandemic, India fared comparatively well with regard to the overall reported case rates. In the beginning of the pandemic, COVID-19 spread quickly. Urban centers became hotspots, and in some cases infection rates were estimated to be close to reaching herd immunity. In March 2020, the central government announced a strict national lockdown, and the rise of new cases was stabilized at a comparatively low level. The restrictions were gradually eased from July till September 2020.

In spring 2021, India was hit by a severe second wave that peaked in May 2021 and brought the healthcare system to the limits of its capacity. The fast rise in cases was spurred by the COVID-19 delta variant that is more contagious than the original variant.⁷⁸ Due to a shortage of appropriate medical equipment and contaminated oxygen cylinders, the second wave was accompanied by several cases of Black Fungus to an extent that several states in India, including Karnataka, declared the situation an epidemic. Despite new regulations and lockdowns, the virus continued to spread in rural areas to a larger extent than in the beginning of the pandemic. India faced a steep third wave in January 2022 and coped better than during the first waves, due to improved governance, seemingly more mild cases, and higher vaccination rates.

Agriculture Supply Chains During the Pandemic: Balancing Essential Services and Worker Protection

As an essential services sector, upholding agriculture supply chains was a priority in the crisis response and helped stabilize India's GDP during the crisis. Processing facilities were allowed to continue operating with additional health protocols in place, and exemptions for inter-state transport were granted.⁷⁹ At the same time, the outbreak of the pandemic and the subsequent lockdown affected all stages of the value chains. Restrictions on mobility affected transportation to rural markets, which affected storage capacities; all had impacts on the patterns of labor migration, leading to a surplus of workers in some regions and a lack of workers in others.⁸⁰ A lack of workers increased wages for workers but also increased costs for farmers. Farmers faced the dual challenge of completing the activities on the farm and affording higher wage expenses in a time of crisis.⁸¹

In India, major concerns for workers were income security, unemployment risks and food security, in addition to the direct health risks of COVID-19.⁸² Migration has mostly been observed away from urban centers, whereas in rural areas, migrant workers tended to stay if they had more stable employment or were provided accommodation and income during the harvesting season.⁸³ Nonetheless, working conditions are at risk of deterioration in times of crisis. Some regions experienced an increase in prices for food provisions.⁸⁴ Food security was a concern with some farm workers being at risk of skipping meals, and children missing out on meals typically provided in schools. Overall, smallholder farmers faced greater difficulties than farmers on larger plantations.⁸⁵

Besides the government, local communities, including companies, helped implement COVID-19 prevention and relief measures, which provided crucial support during the pandemic.⁸⁶ However, not all challenges were equally mitigated. Despite efforts to switch to e-learning and maintain teaching, online classes were not equally accessible to all children.⁸⁷

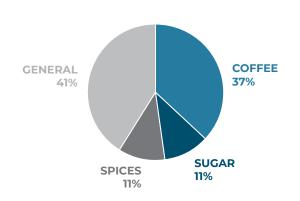
3. Methodology This project studies the impact of COVID-19 on human rights in agriculture supply chains. In particular, the research focuses on the risks to vulnerable workers, and on the resilience of corporate supply chains and sustainability efforts.

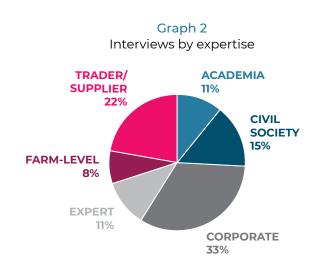
We study the two sectors coffee and sugarcane within the country context of India. These focus areas were chosen for the following reasons: (1) the high economic and social relevance of the agriculture sector, (2) a significant proportion of the workforce with increased human rights risks (e.g., migrant workers and informal labor), and (3) the severe impact of the pandemic. Sugarcane and coffee present two critical cases, as they are economically relevant sectors within India, and India is a relevant producing country for both sectors globally. The two sectors lend themselves to a cross-case analysis. Coffee can be considered a luxury commodity with greater visibility to consumers, whereas sugar is a non-differentiated commodity that is largely used as an ingredient and remains within B2B supply chains.

This research project was conceptualized in multiple research modules. This report documents research insights after completion of the first module. The research of module one is based on a qualitative exploratory study, for which we used both secondary data in form of a systematic literature analysis and primary data in the form of semi-structured in-depth expert interviews. For the latter, we used convenience sampling and referrals and ensured that the interview partners represent all relevant stakeholder groups, incl. global brands, local suppliers and processing plants, global traders, farmers in India, and country and sector experts from civil society and academia.

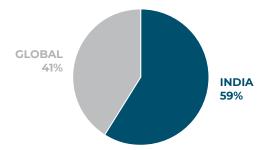
In total, we conducted over thirty interviews, and the data collection took place between February and October 2021. 40% of the interview partners provided general expertise on human rights in agricultural supply chains. Almost 50% of the interviewees exhibited an explicit focus on the coffee supply chain or were experts on the sugarcane supply chain. For the analysis, we combined withinand cross-case analysis between the two sectors. An additional focus was placed on gaining a deeper understanding of the regional impact of the pandemic situation. To this end, additional interviews were conducted with a focus on the state of Karnataka, including traders in different agriculture supply chains such as spices. The majority of our interview partners were from India.

Graph 1 Interviews by category









4. KEY FINDINGS AND DISCUSSION Our study highlights that while some human rights risks are directly attributable to the health crisis, more importantly, the crisis has amplified pre-existing systemic risks.

HUMAN RIGHTS RISKS IN COFFEE SUPPLY CHAINS

The Impact of COVID-19 on Coffee Supply Chains

The impact of the pandemic on the coffee sector was mostly felt through restrictions in transportation and labor shortages, with strong differences between different regions. On the global market, the lockdown in different countries interrupted the flow of exports and led to a temporary shift in the consumer markets from the hospitality sector (which was affected by the lockdown) to more domestic consumption (which was amplified by working in home offices).⁸⁸ During the first wave, coffee exports from India decreased by 17% compared to the previous season.⁸⁹

With regards to the coffee supply chain in India, the first two waves of COVID-19 both hit after or towards the end of the harvest season. National and regional lockdowns restricted transportation and led to labor shortages and limited access to markets. Operations in agriculture were later exempt from the lockdown but faced indirect implications. Administrative processes took time, e.g., when applying for exemption certificates that allow agriculture produce to travel. Logistical disruptions in supply chains led to delays in processing of coffee and other commodities that farmers intercrop as a secondary source of income. Safety precautions were issued by the government and later by the local authorities. If required, COVID-19 tests could be taken only at designated facilities which required workers to travel to get tested, and to wait for the results for up to several days.

Considering the impact on human rights and sustainability initiatives in the coffee sector, on-site visits were suspended, at times for more than one year. This equally concerned sustainability programs from brands on the farm-level and independent third-party audits for certification schemes. Agronomists working with global brands ran trainings with fewer participants and fewer meetings. Certification schemes allowed members to switch to remote auditing or issued temporary certificates.⁹⁰

Farm-level

CHALLENCE – As one farmer stated, "we have somehow escaped the first wave; we didn't have many problems in bringing the labor". However, recounting the second wave, the farmer continues, "getting laborers is a big problem". In response, farmers employed more local workers from nearby villages, paid higher wages, worked longer hours, or faced delays in processing activities. Notably, the farm-level was directly affected by the pandemic situation. The lockdown led to restrictions on transportation, leading to cases where farmers were unable to deliver their produce to curing works for a period of one-and-a-half months. Even if the farmers managed to compensate for labor shortage and transportation restrictions, they depend on the global market. As one farmer formulated this concern, "our coffee dealers are still pessimistic because of the global scenario".

SUPPORT – Farms received support from suppliers in the downstream supply chain, including material support in the form of protective masks, and immaterial support, e.g., in the form of information on COVID-19. In some cases, farmers who are members of sustainability programs of larger brands have received preferential treatment and were allowed to sell their entire coffee production, provided that it met the quality standards, but independent from actual demand. Workers on the farms appear to partly depend on the farmers' goodwill and financial position. In our research, we heard from farmers who support workers' families to afford the school fees for their children (that had to be paid also for remote

Coffee farmers often intercrop spices and fruit on their coffee plantations, such as pepper, cardamom, and citrus fruits. Thereby, they diversify their income and reduce the dependence on coffee prices and a good harvest. Despite earning price premiums for certified coffee, only the additional income from pepper allows the farm to be profitable.

(Based on an interview with an owner of a coffee estate in Karnataka)

schooling during the lockdown) and from cases were activities on the farm were rescheduled in order to provide work for migrant workers who were "stranded" during the lockdown.

RESILIENCE – Our interview partners agreed that the fact that the COVID-19 waves peaked only after the harvest reduced some of the pressure. Coffee prices have been low for several years and made coffee cultivation barely profitable. To the relief of farmers, coffee market prices went up over the course of the pandemic. This underlines the struggle that many farmers face and their limited resources to weather a shock if they had to solely rely on the income from their coffee production. Financially, there is yet little

conclusive evidence on the bottom-line impact. On the one hand, expenses increased (e.g., for wages and transportation), and market access was limited. On the other hand, farmers benefitted from long-term relationships with brands and membership in sustainability programs, and in some cases, farmers had the option to sell their crop before the actual delivery took place and received preferential treatment in the sense that buyers accepted unrestricted quantities.

Preliminary insights suggest a significant differentiation between permanent and temporary, formal and informal workers. This difference can manifest in terms of the employment conditions, and more concretely, in terms of the reliability of support as the pandemic continues. In order to derive robust insights on the impact on workers and their families, more data is needed.

Local suppliers and curing works

CHALLENGE – The local suppliers who we interviewed were in regular contact with the farms they procure from and with the regional authorities throughout the pandemic, and also with the brands they supply. Our interview partners, most of them representing medium-sized to larger curing works, were able to adapt their operations in the factories to adhere to COVID-19 protocols, including fewer people in the factory per shift, temperature measurement upon entering the facility, and wearing masks. Depending on their size, some curing works accommodated workers on-site and could provide facilities for quarantine. One supplier arranged for all staff to be tested for COVID-19 twice at different points of the second wave. One interview partner confirmed their financial support for their employees, in particular *"no pay-cuts, paid leave, wages paid during lockdown"*.

SUPPORT – Regarding their business operations, local suppliers reported no significant labor shortages or disruptions, yet, as one interview partner summarized, *"crop harvesting was pending, and processing and warehousing was not done in time due to lockdown. Time plays a major role. If things are not done in time, it causes direct loss".* Another local processing plant had to close for ten days to adhere to quarantine rules after detecting COVID-19 infections. Local suppliers referred to challenges in terms of logistics, as national lockdowns prevented coffee farms from delivering their produce, and international lockdowns limited the availability of shipping containers. Suppliers played a facilitative role to coordinate the access to medical equipment and hospitals to the extent possible, or by

Containing the spread of cases was crucial, given the lack of medical equipment. Suppliers responded to the direct risks of COVID-19, e.g., by providing their workers with masks, sanitizer, and medication. Larger suppliers of coffee have accommodation for their workers on-site, next to the factories. This was used during the pandemic to create space for workers who got infected and quarantine them from the other workers. Suppliers and factory managers took an interest in their well-being and were able to check in on them.

(Based on an interview with a local coffee trader in Karnataka)

helping workers who were unable to afford the vaccine. Moreover, suppliers consistently engaged in voluntary support for the communities, e.g., with protective equipment such as masks and food donations.

RESILIENCE – Some suppliers acknowledged that at the time of the interview, they "could cope", others were more hesitant to give a prognosis. At the same time, all supplier interview partners were very aware of the struggles further upstream in the supply chain. The main feedback that was relayed from the farm-level was a concern about labor shortages. While suppliers maintained the contact with the farms, one interview partner asserted that "It's very tough ... Our

communication is nothing like speaking to them in person. We haven't done so in more than one year. They didn't want you to come, afraid of danger when from the city. We have to play it safe and use the phone or WhatsApp. ... We cannot collect all the information on the crops." This lack of timely and complete information was felt in auditing and certification processes, too, as different suppliers confirmed: "The auditors collect information on the farm over the phone. This information is getting delayed to eight instead of three weeks".

Global traders

CHALLENGE – Global traders indicated that it was "mostly business as usual under COVID-19", despite noting that "during the pandemic, the global market and consumption patterns changed drastically". The major impact for traders was felt in logistics, as freight rates increased by 100-200%, and the availability of containers for shipments was severely limited. With regard to the upstream supply chain, one global trader stated that the company supported local initiatives, such as the provision of facial masks, and added that "engagement at greater scale relates to awareness raising and informational campaigns on COVID-19".

Coffee traders usually announce the projected quantity of certified coffee that they intend to buy at the beginning of the season. After a pre-specified cut-off date, only certified farmers are allowed to sell the remainder of their harvest, yet traders will not pay a premium. In 2021 during the second harvest since the outbreak of the COVID-19 pandemic, one large trader announced a much earlier cut-off date for certified produce, which farmers said was unexpected.

SUPPORT – To date, direct engagement with farmers is limited. Although traders' supply chain engagement includes an *"ambitious code of conduct for suppliers"*, they are *"aware that not everyone will achieve this"*. As one interview partner pointed out, *"traders are a key player but are seldom in a position to take the lead. They implement strategies from clients, such as buyers, and respond to share-holders and consumers"*. Yet, the interview partner observed a changing perception to move away from *"acting as a trader toward a supply chain manager"*.

Beyond procurement transactions, traders are connected to the farm-level through third parties. During the pandemic, supply chains that were classified as *"not having high risks were allowed to switch to remote auditing"*. This is a

concern insofar as the traders are aware that certain periods in the harvesting cycle are associated with heightened human rights risks – e.g., *"spring season is the worst season for child labor"* – that are difficult to detect without on-site visits. Sustainability trainings conducted by coffee certification bodies had to adhere to social distancing rules and were reduced to 10% of the original number of participants.

RESILIENCE – An interview partner found it *"at times difficult to reach the farmers"*. When following up with the trader's local counterpart in India, we found that the local trading subsidiaries had a good understanding of their suppliers' most urgent needs during the crisis, albeit with a weaker connection to human rights

Data on the scope of such regional responses and needs during the pandemic was limited and not proactively centralized or harmonized. Representatives from global traders and buyers identified this as a missed opportunity to enhance the impact of their support for supply chain partners.

(Based on interviews a global coffee trader with local subsidiaries in the South of India)

and sustainability. The global traders had less specific information on the requirements on the ground and reflected on thematic human rights issues from a more abstract level, e.g., deliberating that to increase farmer resilience, *"income diversification and access to finance must be a key solution to respond to any shock"*. One interview partner took a critical stance, suggesting that *"I do not believe that creating masks initiatives is really impactful"*, adding that *"until the government provides the social safety net, it is our responsibility to concentrate on farmer livelihoods"*.

This was echoed in another interview (in which a global brand reflected on their role as buyers) and the

interview partner doubted whether the support that was given was actually sufficient to provide resilience beyond immediate relief. This supports the insights from other interviews that building relationships in times of crisis is challenging. Relationships that have been established before the crises offer an advantage to strengthen resilience for the upstream supply chain, as there is a heightened sense of collaboration.

Brands and buyers

Many global coffee brands invest in supply chain transparency and sustainability activities in the sourcing countries. Accordingly, our interview partners were able to provide information on how the pandemic affected human rights related risks on the farm-level.

CHALLENGE - The impact of the first wave of COVID-19 on the supply chain was neglectable, and farmers were able to complete any activities in time and procure any inputs they needed. In terms of COVID-19 infections on the farm-level, few cases were reported to global brands. On medium-sized and larger coffee estates in particular, farmers "provided workers with PPE and had good medical access when needed", according to a brand representative's feedback. The impact on employment was more significant. As the first lockdown came unprepared and as factories closed, this left workers without salaries for 2-3 months. As salaries are often paid in cash, the reduced opening hours of banks further delayed wage payments. During the second wave, farmers indicated labor shortages of up to 40% which caused the remaining workers to work overtime. Based on the information of a local representative of a global brand, not all farmers decided to enter agreements with labor contractors to compensate for labor shortages, but when they did, farmers "are asking the labor contractors to get the COVID-19 tests done for all the migrant workers, and few [farmers] are planning to give all the necessary PPE or to inform the local government to get COVID tests done for migrant workers".

SUPPORT – Brands' decisions to uphold purchases independent from changes in demand constituted a key pillar for farmers' ability to cope with the crisis, as our interviews with representatives from the farm-level and curing works confirmed. Referring to the entire period of the pandemic, one supply chain manager (who is based in India) described the brand's support for their suppliers on different levels, e.g., "30-35 coffee farmers are called daily by our agronomists and informed regarding COVID appropriate behavior and vaccines and are given emotional support ... the corporate affairs function provided support like medical aids ... we continue to distribute premiums for sustainable coffee". Brands collaborated with their local suppliers to assist farmers with administrative tasks, such as application for transportation permits during lockdowns. Support from brands was extended to the communities and nearby villages.

Throughout the pandemic, an obvious challenge for global brands was the impossibility for sourcing managers and partnering agronomists to visit farms. A statement from the sustainability manager of a global brand illustrates the

Global brands' responsible sourcing policies often imply strict labor standards for suppliers. The composition of the labor force in the coffee supplying areas changed during the pandemic, as fewer migrant workers were on the farm. In some cases, farmers and processing plants compensated for labor shortages by hiring additional labor through labor contractors. Our interviews suggest that once the responsibility was outsourced to labor contractors, no follow-up was conducted, and no information was provided on the employment conditions for temporary and informal workers. This leads to a blind spot on knowledge of labor conditions for a significant portion of the workers in brands' supply chains.

(Based on interviews with representatives from global brands)

impact of the pandemic even before the second wave peaked: "for the whole year, I could not go and also our agronomist teams could not travel to the farms, so I don't have first-hand information". Nonetheless, sustainability trainings were continued on a smaller scale.

RESILIENCE – Responding to changes in the factors that make human rights risks more likely, a representative from a global brand said that "working parents and closed schools are not a problem. There are care takers on the farm. Children can come". This was reaffirmed in other interviews. primarily in reference to mediumsized and larger farms. Similarly, the impact on workers was not surprising for global brands. As a representative of a global brand noted, these issues are notorious: "Labor issues are serious in India. because India cannot do mechanization like Brazil. But labor issues aren't about economics

only. Because if the farmer isn't profitable, don't expect the farmer to pay workers more than what is legally required, he would rather fire the worker. You need a collective discussion on how you create value so that farmers find money to pay more to workers, and that workers are happy and the job gets done."

Interview partners from global brands identified those groups that are known to be more vulnerable as the groups on whom they had little differentiated insights about how they fared during the pandemic: "We need to answer the questions whether the permanent or migrant, formal or informal workers lost their jobs and why or why not, and whether the stability of the business model stayed, also from a gender perspective". Key Concerns in the Coffee Sector that Require Companies' Attention

Compared to other sectors, the coffee sector fared well during the pandemic. No major disruptions, challenges, or lasting impacts were reported from farmers, local suppliers, global traders, and brands. Although business was mostly conducted as per usual, the pandemic had implications for human rights management and risks. These are key themes that emerged from the interviews:

- Immediate relief in response to the crisis. We generally observed a high willingness to provide relief at all stages of the supply chain. Farmers, traders, and brands have stepped in to support their workers, supply chain partners, communities, and government initiatives. Most of this support was philan-thropic in nature and aimed at immediate relief.
- Reduced in-person interaction and flow of information. Global brands normally rely on field visits to the farm-level, either by their own local staff, their local suppliers, partnering agronomists within their sustainability programs, or by independent auditors. During the pandemic, no field visits took place for more than one year. Interview partners from local traders and from global brands emphasized the importance of personal communication on-site during farm visits. Although regular communication was upheld via phone, information was at times delayed, incomplete or not verifiable.
- Labor shortage and changing workforce composition. Many interview partners reported labor shortages, which caused a longer harvesting time and led to concerns over the quality of the harvest when activities on the farm were delayed. Although some of the shortages were compensated with workers from nearby towns and communities, doing so increased the risk of COVID-19 infections. The availability of labor has been a concern in coffee production before and was aggravated during the crisis.
- Limited information on informal, temporary and migrant workers and on gender. Interview partners from brands' sustainability programs and from local suppliers had only fragmented information on how many migrant workers were part of their supply chains, how their proportion changed over the course of the pandemic, or how these temporary workers fared during the crisis. More than half of these migrant farm workers are typically women who are also more vulnerable, and an interview partner from a global brand highlighted the need to investigate the longer-term impacts of the pandemic on workers' rights from a gender perspective. However, no systemic, measurable actions to this end were mentioned.
- Livelihoods and security of income. Coffee farming had barely been profitable before the crisis. During the pandemic, despite farmers' ability to complete the harvest and rising market prices for coffee, the financial situation on the farm-level came under further pressure. Further research about the financial situation of farms is needed to gain a holistic picture of the financial situation of farmers, and smallholder farmers in particular, and whether the responses from corporate actors and the Indian government could mitigate these risks.

Coffee Sector: Focus on the Farm-level to Increase Resilience

Our initial findings show a high level of engagement between brands and their local suppliers and the farm-level, and relationships and communication channels that had been established prior to the pandemic were effectively used during the pandemic. Notably, our findings mainly refer to medium-sized and larger coffee estates, while evidence on smallholder farms is less conclusive and requires further investigation.

Global brands identified and responded to immediate needs during the pandemic and provided material and immaterial support to their local suppliers, e.g., by maintaining procurement from farms, and in the form of PPE, food donations, and logistical support. Corporate interview partners also seemed to be aware of the systemic challenges in the coffee sector and the pressure they put on farmers' subsistence, including the effects of climate change, or the continual decrease in the availability of farm workers. However, brands did not identify concrete mitigation strategies for longer-term human rights impacts.

Based on these insights we conclude that good local networks in India between the farm-level, local suppliers and authorities and other supply chain actors already exist that could serve as implementation partners for risk mitigation strategies. Focusing on medium-term actions to secure farmers' livelihoods would be a necessary first step to ensure the resilience of coffee supply chains from India.

HUMAN RIGHTS RISKS IN SUGARCANE SUPPLY CHAINS

The Impact of COVID-19 on Sugarcane Supply Chains

Different interview partners stated in similar terms that, "the agriculture industry in general was not so badly affected during the pandemic", and that the different commodity sectors found ways to cope with the challenges. Over the course of the pandemic, distribution networks turned out to be a bottleneck for the sugarcane sector, both globally and domestically. Regular reports of supply chain disruptions were a consequence of different quarantine and lockdown regulations, closed ports, and limited availability of containers.⁹¹ The global sugar trade experienced an initial drop in the market price of raw sugar, but the market adapted to the situation and prices recovered within less than a year.⁹²

India classified the sugarcane sector as an essential service, in order to ensure the continuity of cultivation and processing of sugarcane, and to avoid losses of income in the sector. The growing cycle of sugarcane is long (between 12-18 months depending on the crop variety and region) so that the COVID-19 waves coincided with different activities. During harvest, the main impact of the pandemic related to logistical challenges such as the availability of migrant workers, and to getting the harvested cane to the mills in time. In areas where the sugarcane had already been processed and was stored, the main challenge was getting access to markets.

Financially, good sugarcane yields in 2020 supported the sector's ability to absorb the impacts of the pandemic, as did the high export levels of seven million tons of raw sugar. However, government subsidies to encourage sugar exports were postponed during the pandemic and did not provide the expected relief for the financial liquidity of sugar mills.⁹³ The minimum support price was announced unusually late which furthermore impacted mills' finances and thereby, payments to farmers.⁹⁴ The continuity of supply throughout the pandemic masks the human rights implications for different stakeholder groups which a deeper look into the supply chains reveals.

Farm-level

CHALLENGE – A representative of a global brand noted that "this year [2020], there weren't as many migrant workers, and getting cane cutters was a big challenge". Migrant sugarcane cutters were reluctant to travel to the sugarcane farms for fear of the pandemic.⁹⁵ For the same reason, villagers in farming areas were at times hesitant to welcome migrant workers. Moreover, logistical challenges affected

Although the sugarcane supply continued, the effects of the pandemic on the different production steps left farmers (and consequently workers) economically very vulnerable. They faced challenges from different sides with few options to compensate eventualities such as increasing expenses and losses of income.

(Based on interviews with representatives from different stages in the sugarcane supply chain)

the access to both inputs and to markets. Evidence relayed to a local expert organization suggests that, e.g., agro-chemicals were not available. Local farmers found it difficult to market their crop during the pandemic. For some farmers, these challenges limited the prospects of cultivating sugarcane to the extent that they decided to not grow sugarcane.⁹⁶

SUPPORT – A local sugarcane trader said that *"farmers had to pay more, as labor was not going to come otherwise".* In other cases, concerns over unpaid wages accumulated in some regions, e.g., in Uttar Pradesh, that amounted to one or even two seasons.⁹⁷ Rising debt levels of field workers during the lockdown have also been reported for other states, e.g., Maharashtra.⁹⁸

To maintain supply, workers, sometimes by force, were required to continue cutting the cane when the lockdown started.⁹⁹ In the context of migrant workers, a local trader provided a similar example, indicating that migrant workers have

little choice: "workers were given the option to leave their job of take a cut of 20-30% of their income – everyone just wants to survive". Much support came from the communities, and also farmers lent support to migrant workers wanting to return to their hometowns, according to a local trader.

The impacts manifested on different human rights. Containing the spread of COVID-19 focused on restricting mobility and on introducing stricter health protocols. On the farm-level, low standards of accommodation and access to sanitation facilities have also prevented workers from adhering to recommended hygiene and distancing protocols under COVID-19.¹⁰⁰

RESILIENCE – A local sugarcane trader summarized that during the pandemic, *"the poorer became poorer"*. Different expert organizations shared the concern about the precarious situation of those workers in the deepest links of the supply chain. Expert organizations and civil society organizations explicitly emphasized the risks to women and to single women in particular, and to migrant workers. Although not substantiated by numbers, expert organizations are concerned of a vicious cycle, as fewer employment opportunities, delayed wages, and closed schools jointly raise the stakes of child labor or child marriages.¹⁰¹ The pandemic had a measurable impact on indicators that are associated with higher risks for child labor. For instance, schooling has been interrupted either by the lockdown or by families' inability to afford the fees.

Overall, as one industry expert concluded, *"the problems are the same, but COVID exacerbated them"*. Our interviews are exploratory, and evidence on the farm-level comes from interview partners further up in the supply chain. Obtaining conclusive evidence would require additional field research.

Mill level

CHALLENCE – For the first sugarcane harvest during the pandemic, a shortage of harvesters was anticipated by mills. Data from Tamil Nadu shows that during the first wave, the lockdown resulted in the factories being underutilized by more than one third in some areas.¹⁰² This affected the income of sugar mills. Incomes were further affected as a result of time delays between the time that sugarcane was dispatched to the mills and the time when it was processed.¹⁰³ These challenges extended to mills' ability to sell their produce. A local trader recounted that "sugar moved from the mill to the port, but there was no labor at the port, and containers were not readily available which was a challenge", leading to "extra cost, chaos, supply disruptions, and delay in the receival of products". Referring to

Our findings show the ripple effects of human rights implications, if the different actors in the value chain lack the resilience to intervene through timely and targeted action. For instance, the pandemic complicated the coordination of transportation schedules between farms and mills, leading to longer queues and waiting times in front of mills. Cut-tocrush delays are critical because the sugarcane starts to dry up, which reduces its weight and value.

(Based on interviews with industry experts and local traders in the sugarcane sector)

the implications for people, the trader highlighted the time that adjustments requirement, noting that only after a full harvesting cycle, when the second wave had peaked, *"things are now pretty streamlined"*.

Mills played a central role in coordinating the responses to the pandemic, as different interview partners confirmed. Transparency is a challenge in the sugarcane sector, and on-site visits to mills are rare, and even more so during the pandemic. A representative from a certification organization stated that their organization had received "photographs" that showed how the mills re-organized their processes completely; there are long waiting cues outside the mills of farmers who brought their sugarcane after the harvest". The same expert stated that in terms of their operations, "mills picked up precautions, thereby maintaining activities and protocols" around the sugar production, referring to mills that had already been abiding by the high standards of a certification body. In order to absorb the lack of labor, some mills provided transportation for workers between the different workplaces. In some cases, large sugar factories were able to pay above-average wages to counter the labor shortage by employing workers from other factories.¹⁰⁴

SUPPORT – Mills launched awareness campaigns to inform their workers about COVID-19 and ways to reduce the risk of an infection. Some mills also "moved many activities to contain the pandemic in-house", including COVID-19 testing, according to a local trader, and started to "push for vaccination and made this a mandatory requirement" for their workers. Operating in alternating shifts of 7-10 days, mills "created a lodging and board system to encourage workers to stay in the area". A local trader describes the close links with different stakeholders, "the mill's cane development department was in communication with farmers and provided them with what they needed, such as medicine or PPE". Several sugar mills used their production facilities to support measures against COVID-19 and turned to producing sanitizer during the pandemic. A trader noted that "mills produced sanitizer in very large quantities but did not know how to market it".

RESILIENCE – Handling the economic impact appeared to have been more challenging, and not all mills could afford the additional expenses of taking precautions at scale. According to a local trader, "many traders had added costs, and then passed these on to the consumer" to cope with the pandemic. Speaking for mills in general, the trader says that there is currently little incentive to invest in higher standards, because "whether we put a lot of effort in or not, we do not get a premium". According to local industry experts, "cooperatives were more proactive and did more than the private mills" in supporting farmers. Yet overall, a local trader highlights that after the second wave of COVID-19, "people are still struggling to stay afloat".

Our interview partners mostly referred to sugar mills that already abided by above-average social and sustainability standards before the pandemic. These tend to be the mills that global brands source from. The specific implications need to be further assessed in light of the individual mills and geographic location.

Brands and buyer level

CHALLENGE – Several interview partners from India noted that "high levels of insecurity and uncertainty" in the beginning of the pandemic had consequences on labor migration patterns to a degree that buyers prepared for a possible drop in sugar production and fluctuations in the market price for sugar. Representatives of sustainable sourcing programs from different global brands indicated their concern about deteriorating labor standards throughout the pandemic. Concerns related in particular to the risks for forced labor and child labor.

SUPPORT – Sugarcane is a commodity with a high price elasticity and strong dependency on market prices. A local supplier noticed a shift during the pandemic toward a greater interest in the mills' operating standards, observing that "now there are customers saying, 'we are willing to pay more, but we want to go to a good mill". Whether this trend persists will depend on the commitment of buyers: "if the supply chain absorbs the cost, it will be fine, if not, change will take a long time", yet at the moment, "still a large amount of investors is not interested in doing too many things that incur costs".

RESILIENCE – Global brands were aware of the immense human rights challenges in the sugarcane sector that would likely be amplified throughout the pandemic, and highlighted the systemic dimension of these concerns. A primary concern

Transparency beyond the mills is limited, and a significant part of the brand's information relied on secondary sources or partner organizations, rather than direct suppliers. (Based on interviews with representatives of

global brands)

related to direct human rights risks such as working and employment conditions. Brands also acknowledged the fact that *"many workers in the sugarcane sector are just so poor"* as a major challenge to building resilience. The brand's representative added that, *"if you have a list of risks, social or environmental, everything needs to be addressed in India; this was always*

kind of overwhelming". Brands unanimously emphasized that the need for collaboration between brands and with different stakeholders only increased.

Key Concerns in the Sugar Sector that Require Companies' Attention

The first wave of the pandemic reached India during the harvesting time of sugarcane. As an essential service, the sector was exempt from the lockdown, so mills continued to operate, and supply was not interrupted. The interviews that were conducted after the first wave of the pandemic highlighted the lack of data available on the farm-level and the slowness of information flowing down the supply chain, particularly from sugarcane mills to global buyers, but also to expert organizations.

There is a noticeable ambiguity about measures to react to the pandemic and their effectiveness. Our interview partners in different positions within sugarcane supply chains indicated that the availability of cane cutters was challenging, but that farmers were ultimately able to complete the work, yet evidence also suggests that this came at the cost of workers' livelihoods. The government provided financial support and relaxed export restrictions, yet the support reached farmers and mills too late. Also, some government schemes are not eligible for informal workers.

- Mills ensuring hygiene standards and continued production in the short-term. A representative from an expert organization on sustainability in the sugarcane sector recounted that precautions were taken at different stages in the supply chain. Families of workers made cloth masks for their own protection. Mills took precautions at production sites, and supported relief measures to help communities, such as switching to produce hand sanitizer at their facilities and running awareness campaigns on COVID-19.
- Paused or interrupted multi-stakeholder engagements and restricted monitoring. Corporate interview partners said that supply continued, but a multistakeholder workshop for NGOs, industry representatives, farmers, and government officials was paused. On-site visits were deferred, and instead, expert organizations relied on photographs taken by mills to assess how they implemented health and safety protocols.
- Lack of data on the situation of migrant workers. A key human rights concern in sugarcane production relates to labor conditions, especially for migrant workers. In our interviews, there was a noticeable lack of specific information about the impact on workers. For example, a local representative from an expert organization on sustainability in sugar would say that during the first wave in rural areas, there was no shortage of labor. However, neither the expert

organization nor corporate interview partners were able to obtain reliable information about COVID-19 impacts on migrant workers. The expert organization was in the process of finding out "whether COVID made [the situation for migrant workers] worse or rather stopped mills from recruiting easily" and deemed both cases possible.

• The risk of child labor remains a concern. The definition of child labor is used ambiguously, and few data is available at this time to substantiate concerns. Yet there is evidence from sugarcane growing regions across the country, including Uttar Pradesh, Maharashtra, and Karnataka, that demonstrates the impact of the pandemic on drivers that are associated with a greater likelihood for child labor. Similar accounts have been reported in regard to forced or bonded labor.¹⁰⁵

Sugarcane Sector: Focus on Procurement Policies to Advance Human Rights

Insights of this study indicate that lead firm are not unaware of potential risks in the sugarcane supply chain, yet individual firms have little leverage with mills to address these risks. The findings suggest that persistent local engagement with mills and the broader ecosystem, including industry peers, is key for global brands.

For the sugarcane sector, the interview partners provided more information on the expected economic impact than the social impact of the pandemic. The sugarcane sector in India is less accessible for lead firms' human rights engagement on the ground. Most human rights monitoring and enforcement is mediated by supply chain partners, such as mills, and characterized by a lack of transparency. Regular direct communications with the farm-level are missing. Our findings indicate that although there is generally a good understanding of the human rights risks in the sector and a fairly good knowledge of the likelihood of human rights abuses, there is little concrete support for sugarcane farmers and cane cutters.

Interviews on the sugarcane sector suggested that the most promising activities toward enhancing respect for human rights are those that focus on the medium-term prospects for improvement. There is currently little leverage to react to crises. The strongest levers appear to be collaborations among lead firms sourcing from the same mills as well as the mobilization of shared interests that are of intermediate rather than immediate urgency. For instance, several separate projects on climate change and water management were successful in the past and can be built upon, e.g., to address labor conditions on sugarcane farms. Advancing the engagement incrementally or indirectly was found to be a point of entry to start the conversation to address the drivers of human rights risks.

A REGIONAL PERSPECTIVE ON THE PANDEMIC: THE CASE OF KARNATAKA

The following section takes a regional perspective on the impacts of COVID-19. It studies the supply chains of different agriculture commodities in the state of Karnataka to identify possible synergies for an effective crisis response by brands and local suppliers.

The subsequent paragraphs summarize the insights from interviews with local traders for spices in India. Traders are our focal level as we are interested in the impact of the pandemic on the resilience in the upstream supply chain.

Supply Chain Models across Different Agriculture Commodities

Karnataka is one of the major regions for producing coffee in India. Our interviews with coffee farmers highlighted the reliance on additional sources of income (e.g., from spices, fruits, or timber), thereby emphasizing the relevance of considering farms as a unit when assessing farmers' livelihoods. We therefore analyzed the impact of COVID-19 on supply chains for spices to assess farmers' resilience on a more holistic level. Moreover, we looked into the impact of the pandemic as a regional phenomenon to identify similar challenges across different commodities that can be addressed more effectively through collaborative efforts.

We interviewed representatives from different local trading houses for spices in India that supply global buyers. The interviews were targeted at complementing our insights on the regional impact of COVID-19, the challenges and needs in the upstream supply chain, and corporate responses, and are not expected to give a full account of the spices sector. India is the world's largest producer, exporter, and

It is common for coffee farmers in India to diversify their income by growing a number of spices, including pepper, cardamom, or vanilla. Global food and beverage companies, too, procure different commodities from the same region (e.g., coffee and spices), yet the supply chains rarely overlap. These links between the two sectors on the farm-level and on the buyer-level suggest an opportunity to join efforts to address systemic human rights challenges and to scale the impact. consumer of spices, and the sector plays an important role in India's agriculture industry. We focused on Karnataka, as this state is one of the major regions for our research on coffee and among the five largest spices growing states in India.¹⁰⁶

All of the traders we interviewed procure from several hundred farmers, mostly smallholders, and run sustainability programs with the farms. These programs appear to be structured similarly, yet the scope differs. One trader's sustainability program focused mostly on large farms; another trader covered around

70% of smallholder suppliers in a certification scheme. Like coffee, such programs involve a two- to three-tier system for working with agronomists, who conduct trainings and field visits, and include a price premium for certified produce.

The farm ownership structures include farms that are owned by traders, by smallholder families, or by landowners who hire a farmer to be in charge for the season. The living and working conditions show strong discrepancies between supply chains of the same buyer. The spices sector employs both permanent and temporary workers. The former tend to live in local communities and commute to the farms and the latter, in some cases, set up temporary huts in the fields during the time of harvest.

The Regional Impact of COVID-19 on Supply Chain Resilience

1. The immediate impact of COVID-19 depends on the on-site situation prior to the pandemic. Many farms are remote and isolated and COVID-19 case rates remained low, but rose when additional labor was hired from neighboring communities or towns. Suppliers reported different case rates for their facilities, ranging from processing factories where interview partners stated that *"workers who are less well-off struggle a lot"*, to factories where almost all of those who were infected recovered with no fatalities.

When cases were detected on a farm, the virus seemed to have spread rapidly, infecting workers, farmers, and managers. In case of COVID-19 infections, depending on the capacity of factories, infected workers were quarantined on-site, or the factories were closed down for up to ten days. Farms and communities that experienced high case numbers with inadequate access to medical treatment also reported cases of long COVID. As one interview partner from a local spices trader noted, *"working efficiency had noticeably gone down."*

The long-term impacts of COVID-19 were only marginally touched on by interview partners, yet several mentioned the impact on mental health. None of the interview partners took systematic action to address these needs; however, these interviews took place in the middle of the second wave. Local suppliers described the *"trauma"* and *"fear"* in the communities. In some cases, this led to a stronger *"suspicion and discrimination against migrant workers"*, who came from the cities nearby or from farther away. Given the case numbers of COVID-19 in India, this human rights concern will have to keep being monitored.

Lead firms need to collect information on a detailed and timely basis in order to identify the impact on human rights risks and the most urgent needs.

2. Labor shortages had limited impact on supply chain resilience yet amplified human rights risks. For armers, both in the coffee and in the spices sector, labor shortages, particularly during the second wave of COVID-19, were a reoccurring concern in our interviews with local coffee and spices producers in Karnataka. Most interview partners said that they were able to recruit sufficient workers, even though for some suppliers this meant that the wage levels for workers had significantly increased. Because of the absence of migrant workers, farmers and suppliers hired members of neighboring communities and labor contractors to recruit additional workers. However, in the case of specialized jobs, such as the pepper harvest on coffee farms, not all farmers were able to find workers and thus, were unable to sell their harvest.

For workers, the type of employment is decisive for compliance with human rights. Permanent workers are in a better position than temporary and informal workers. Moreover, when workers are hired by labor contractors, their benefits depend on the contractors' conditions, such as in relation to paid medical leave. As one coffee supplier put it, *"there are decent and not so decent labor contractors."* Another supplier made a similar remark on farmers, stating that *"most farmers are decent and provide for the workers."* These statements underline that companies in the coffee sector have good traceability to the farm-level but have not established a clear feedback cycle down to the worker level. Given the evidence from our research, companies need a clear breakdown of the workforce to advance their human rights due diligence.

Understanding systemic human rights concerns is fundamental to advance supply chain resilience. To do so, lead firms can explicitly analyze indirect and medium-term effects in their human rights due diligence, and differentiate between worker groups.

3. Local traders mediate between the farm-level and the buyer-level by acting as a source of information and partner in implementing crisis relief. There are different procurement models for agricultural commodities, both within sectors and even within brands. The leverage of brands over the supply chain changes depending on, e.g., whether they source from smallholders or medium and larger coffee estates, and the proportion that is sourced directly from farmers or traders. The circumstances of farmers and workers also differ depending on, e.g., the size of the farm, whether farms are part of a certification program, or the type of traders that farmers interact with. Traders are at the intersection of the farm-level and the buyer-level across different supply chain models, and have significant leverage.

In the interviews, suppliers consistently reported that during the pandemic, operations in the agriculture sector overall experienced a marginal impact. Companies took precautions in accordance with state regulations. A spices trader stated that wherever possible, *"the number of workers in a shift was reduced so that factories operated at 50% of their capacity"*. Also, companies implemented government guidelines and adopted hygiene and social distancing protocols at their factories. Hand sanitizers, PPE, and reusable masks were provided on-site. Representatives from global brands collected feedback from local suppliers in order to coordinate support. Notably, the language changed from a CSR-focus in conversations with local suppliers to a rights-centric focus at the global level.

Traders are in the position to capture and translate the needs from the farm-level to global buyers. Our interviews suggest untapped potential in encouraging awareness for systemic human rights concerns.

4. Community support from civil society and the private sector provided immediate relief. The implementation of support measures were depending on the local infrastructure. Companies sought different options to provide direct support throughout the pandemic. Companies at different stages in the supply chain showed solidarity with communities in the regions where they operate and source from. Frequent actions included the provision of food and of CSR kits. Some companies "offered produce from their own factories" (as has been the case for one spices supplier), while others "raised donations from philanthropic agencies" to increase their impact.

Interview partners also highlighted options for indirect support, e.g., in complementing or implementing public services. The school system switched to home schooling. However, as one spices supplier noted, in rural areas, "many children were lacking adequate access to online schooling," and "the internet connection only works in 50% of the time." The supplier continued that not all children possessed adequate devices to attend classes and "many children developed eye issues." Children aged 16 years-old and above may work, but generally, "parents were too afraid to take their children to the farms due to the fear of COVID-19". Some migrant workers even traveled without their children who then stayed with their relatives. Proactively supporting communities can mitigate human rights risks for lead firms' supply chains. Our interviews highlight how engagement on the ground helps to identify and address the drivers of risks.

5. The economic impact plays a decisive role on how farmers fared during the pandemic. The development of global market prices for agricultural commodities is a major concern across sectors. Some suppliers had the financial resources to cope both during the first and second wave of the pandemic, but others were not always able to guarantee that wages were paid on time. Our interviews with farmers, local traders, and local representatives from global brands indicate that the resilience of supply chains depends on the prices of the commodity and on sales channels. Sectors such as spices, experiencing high demand, or coffee, benefitting from strong market prices, did relatively well. Farmers who had long-standing relationships with traders or brands were better able to sell their harvest than smallholder farmers who depend on the physical opening of local markets.

It became evident from interviews across commodities that responsible sourcing standards and sustainability programs are not sufficient to guarantee livelihoods in the deepest supply chain layers, and that collaborative efforts throughout the ecosystem are needed.

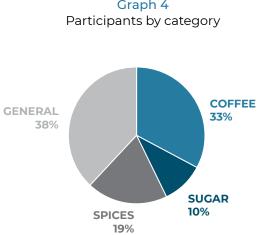
5. BUSINESS ROUNDTABLE

Creating a Platform to Facilitate the Dialogue Between Local and **Global Companies**

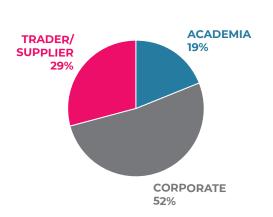
Following the interviews, we organized a business roundtable on corporate responses to COVID-19 in India. The aim of the roundtable was to create a platform for an informal exchange between companies, and to bring together local and global stakeholders, incl. brands, global traders, and local suppliers and producers. The roundtable took place online in the end of August and was co-hosted by the Geneva Center for Business and Human Rights and the Athena School of Management as an academic partner from India. The guiding question was, "How can stakeholders collaborate to respond to the prolonged COVID-19 crisis, so that immediate, medium- and long-term production and sustainability targets can be met?"

During the 90-minute meeting, representatives from the participating companies each provided insights on what they perceived as the key needs for farmers and workers and shared what their organization had been doing in response to the crisis. The participants then developed concrete action steps in breakout groups and in a concluding plenary discussion. The event was conducted under Chatham House Rules.

The participants in the roundtable were all involved in sustainable sourcing programs of some form that involve regular trainings, extension services of agronomists reaching out to the farm-level, and longer-term relationships with suppliers. At the roundtable, representatives from the three categories coffee, sugar, and spices were represented, and over 70% were based in India. Nearly two thirds were part of the interviews preceding the roundtable.

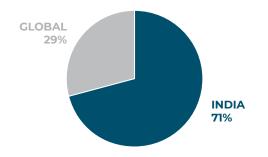


Graph 4

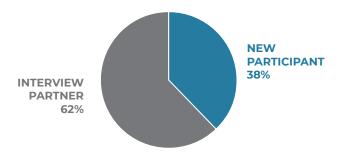


Graph 5 Participants by expertise

Graph 6 Participants by location



Graph 7 Interview partners and new participants



The Challenges for Human Rights are Similar for Different Supply Chains

Participants' experiences resembled each other in that they prioritized the continuity of economic transactions and focused their corporate responsibility activities toward distributing urgently needed items for daily use (such as hygiene products), and supporting food security programs. Noticeably, the engagement intensified during the second COVID-19 wave to provide logistic support and organize medical equipment for communities. However, workers who were in a weaker position before the pandemic faced significant challenges to ensuring their and their families' livelihoods, even though companies' immediate relief activities could mitigate the most immanent risks.

The discussion also highlighted the dependency of livelihoods on the farm-level on generating income from harvest. Economic viability was ensured until now because COVID-19 cases largely peaked after the harvest had been completed, for all three categories coffee, sugar, and spices. However, there are limited reserves to compensate significant disruptions. Partly, this was felt by farmers who rely on local markets (so called mandis) to sell their produce, which were closed during the lockdown. Companies expect longer-term consequences, including shifts in the availability of workers, and physical and mental health impacts of the pandemic, yet they do not yet systematically address these issues.

The participants of the roundtable agreed that the pandemic revealed systemic challenges to the protection of human rights standards, in particular for workers, migrant workers and, to some extent, farmers in the upstream supply chain. Participants recognized the potential of this pandemic to direct attention toward solving such systemic challenges, with the goal to increase supply chain resilience long-term. Participants expressed their interest for enhancing collaborations to address these systemic challenges to human rights.

Addressing systemic challenges requires collaborative efforts

The roundtable resulted in several concrete recommendations for action.

- First, participants emphasized the necessity to involve the entire ecosystem for addressing the root causes of human rights risks.
- Second, they re-affirmed the need to continue the upstream integration of sustainability training programs into the deeper layers of the supply chain in order for such efforts to effectively build resilience.
- Thirdly, the participants identified synchronized action as a major leverage to provide efficient and timely support.

The coordination of information and logistics was a major obstacle during the pandemic. Instead of replicating similar crisis responses in siloed approaches, companies could cooperate to set up a central contact point that bundles resources and aligns actions within the communities.

Finally, participants discussed the issue of livelihoods of vulnerable groups, which the feedback round had identified as a primary risk. Work on digitalization and innovative farming techniques is not new, yet it is often considered in context of increasing transparency or productivity. During the roundtable, participants explicitly viewed these techniques from a human rights perspective and associated these techniques with the potential to protect human rights more directly. For instance, the discussion focused on creating new venues to connect farmers to the market, when physical markets are inaccessible.

The roundtable aimed to present a forum for companies to engage in an open exchange on a pre-competitive level, and to develop medium-term strategies. It encouraged companies to consider the medium- and longer-term consequences of the crisis. There was broad support for a follow-up roundtable.

6. RECOMMENDATIONS

In the following, we present concrete recommendations for lead firms in the supply chain based on our research insights on COVID-19 impacts on human rights and supply chain resilience.

We understand that all supply chain actors need to cooperate, but brands need to be the ones to take the initiative. In the following, we outline specific recommendations for firms to respond to the crisis in a way that supports a stronger integration of human rights throughout the supply chain.

1. RAISE FLAGS EARLY: React fast to supply chain disruptions and conduct Urgent Action Human Rights Due Diligence to understand immediate impacts on business and human rights.

Given the far-reaching impact of COVID-19 on supply chains, workplaces, and communities, we recommend urgent action human rights due diligence (urgent action HRDD). This implies a re-assessment of existing human rights due diligence findings in light of drastic changes in companies' operating contexts.¹⁰⁷

Urgent action HRDD assesses shifts in the parameters of companies' operating environment and flags conditions that are associated with heightened human rights risks. It focuses on changes in the projected likelihood of these risks, using the drivers of human rights risks as proxies. By flagging concerning developments early-on, urgent action HRDD activates preventive measures, such as raising the concern explicitly with supply chain partners.

EXAMPLE

Agriculture supply chains are considered to have high risks for child labor. The pandemic affected several factors that are associated with increased risks for child labor, including the closing of schools, the suspension of on-site audits, and financial hardships for workers on farms and in processing facilities. Urgent action HRDD could trigger an issue-specific follow-up with supply chain partners, aimed at gaining information about the drivers of child labor. This can include a range of specific indicators, such as the availability of caretakers for children on farms, the availability of paid medical leave for workers with COVID-19 infections, or the availability of Wifi to participate in online classes.

Build a human rights due diligence network that can be mobilized quickly.

We recommend building a network that can be mobilized quickly and collect feedback in times of crisis. This feedback can be informal or standardized and should be collected repeatedly. Companies should engage vertically with their supply chain partners and reach out horizontally to industry peers. Strong stakeholder relationships are an asset to improve the effectiveness and openness for collaboration in times of crisis.

Draw on previously conducted human rights due diligence.

Urgent action HRDD signals commitment to human rights. It reaffirms companies' engagement with human rights on the ground, including situations when the usual policies, such as field visits, are no longer possible. Ideally, companies should be able to draw on previously conducted human rights due diligence and re-assess the identified risks. To increase effectiveness in situations of incomplete information, this analysis should encompass the factors that drive human rights risks.

Start actions that can preserve human rights achievements in the longer-term without delay.

Urgent action HRDD aims to harness different stakeholders' unique perspectives and to identify opportunities for coordinated, scalable contributions to alleviating human rights risks. Considering the effects of the crisis on drivers of mediumterm human rights risks targets the resilience of human rights engagements. The aim is to find ways to amplify or complement emergency relief. Quick actions that can preserve human rights achievements in the longer-term should be initiated without delay.

2. ANTICIPATE MEDIUM- AND LONGER-TERM HUMAN RIGHTS RISKS: Move beyond crisis response and analyze systemic issues that may arise from a crisis.

Anticipating medium-term human rights risks is an investment in the stability of supply chains. Resilience is created when the causes of human rights risks are mitigated and future risks are prevented. Companies that anticipate changes in the likelihood of human rights abuses have the chance to take preventive action before harm occurs, and thus to avoid situations that require remedial action. Moreover, stable supply chain relationships are a precondition for pursuing longer-term projects that in turn contribute to supply chain resilience, such as experimental research on ways to adapt farming to climate change.

EXAMPLE

The lockdowns affected the ability to conduct regular on-site audits, which are the backbone of existing sustainability initiatives. This situation has sparked discussions regarding the digitalization of auditing processes. First, this is an opportunity to address systemic concerns. Instead of replacing in person visits with virtual tours, discussions focus on permanent (rather than temporary) approaches to auditing and transparency. Second, adopting digital alternatives to in-person visits potentially involves the collection of sensitive or personal data. Considering the medium-term consequences implies an assessment of the human rights risks that such digital solutions generate. The track record of data security in the respective operating context should be an integral part of this assessment.

Systematically review the medium- and longer-term consequences.

Companies should systematically review the longer-term consequences of responses to the pandemic. It is currently unclear whether the impacts of the pandemic will be permanent, such as the health impact of long-term COVID-19 symptoms, labor shortages and changes in the workforce composition, or new consumption patterns in the downstream supply chain. In addition, indirect effects of the crisis deserve special attention. Vulnerable groups that were at greater risk during the crisis might also be disadvantaged in the recovery process, e.g., as deficits in access to education lead to unequal opportunities in the long-run.

Extend human rights impact assessments to the crisis recovery process.

Human rights impact assessments of the medium-term impacts of the pandemic should proactively extend to measures that were taken as part of the crisis recovery process. Focusing on solving an immediate challenge can leave the root cause of the human rights risk unaddressed, or worse, detract attention away from new human rights risks that a short-term response might trigger. Assessing and addressing extended risks matters, as in some cases, there is a limited window of opportunity to address the medium-term human rights risks.

3. SPOTLIGHT ON TRADERS:

Collaborate with actors across the entire supply chain and involve traders, which are underestimated supply chain actors that have resources and leverage.

Our study emphasizes the importance of intermediaries in the supply chain for implementing human rights awareness. These include traders, sub-traders, and processing facilities, both inside and outside the country of origin of the agricultural produce. Ensuring visibility of human rights impacts presumes visibility of human rights efforts at all stages of the supply chain. As traders are less exposed to public scrutiny, the impetus should come from brands and lead firms.

EXAMPLE

Working on human rights issues within a business relationship can be sensitive. Brands need to find partners and topics that are accessible, and identify a good timing and framing to address human rights concerns. One interview partner from a global brand stated that topics that are discussed under a human rights label in their headquarters are translated into specific social or environmental issues in subsidiaries in order to receive sufficient buy-in. A different brand mentioned that suppliers' openness to engage on human rights topics depends on their current economic well-being and on previous positive experiences in projects on less controversial topics. Traders have the local understanding and the supply chain relationships to facilitate human rights engagement accordingly.

Harness traders' position in the supply chain to advance traceability.

Traders are uniquely positioned to connect global buyers and individual farmers. Given their size and position in the supply chain, traders have economic leverage in both directions of the supply chain. They are expected to conform with global buyers' human rights policies and in some cases, are also in charge of ensuring compliance in the upstream tiers. As collectors of the produced harvest from a multitude of smallholder farmers, traders are closest to advancing the next level of traceability in the supply chain.

Take advantage of traders' relevant knowledge to enhance transparency.

Reports on human rights are often audience-oriented and driven by publicity. In the downstream end of the supply chain, brands have developed policies and undertaken efforts to understand their operations' human rights footprint. In the upstream supply chain, civil society organizations provide detailed information from the farm- and worker-level and offer in-depth analyses on the drivers behind human rights challenges. In between, traders can fill in the blanks and highlight the bottlenecks to translate and maintain human rights policies at the worker-level.

4. ADAPT RESPONSES TO THE REGIONAL CONTEXT: Prioritize key geographies and pool resources to address challenges locally.

Implementing human rights benefits from standardization and measurability, yet real impact tends to be more complex. It is important to consider the regional context when addressing human rights issues, either through a commodity-based or an issue-based perspective. Both approaches are valuable as they support the consistency and manageability of policies, facilitate the exchange between global insights and the realities on the ground, and provide in-depth insights into the local dynamics behind human rights issues.

EXAMPLE

Migrant workers are globally at risk of discriminatory practices and of labor exploitation if they are employed informally. In India, as our research indicated, these risks might be compounded by subconscious remnants of the caste system which can fail to raise attention to discriminatory labor practices. During the pandemic, labor shortages were compensated through different routes of recruitment. Companies should put measures in place to identify discriminatory and sub-standard labor contracts. These measures must be responsive to the regional context and allow companies to identify the root causes of discrimination and distinguish, e.g., between strucutral and cultural factors, so that effective responses can be taken.

Identify opportunities for advancing human rights.

A regional perspective will offer opportunities for creating a strong foundation for human rights in companies' ecosystems. Different regions face distinct socio-cultural factors and geological and climatic conditions, and differ in their particular workforce composition, regulatory context, infrastructure, or ownership structure of farms and processing facilities. Companies can use these differences and identify areas that are conducive to advance human rights resilience.

Implement better-targeted measures.

Regionally concentrated efforts to improve the human rights situation offer an opportunity to better target measures and anchor them in context. A regional focus allows to differentiate between country and sector risks, and can garner support to leverage complementary competences of different stakeholders.

Explore options for joint collaborations on root causes.

Regionally concentrated efforts can emphasize root causes that might otherwise remain overlooked in standardized approaches. Companies ideally explore options for collaboration on a pre-competitive level to maximize their joint impact on addressing the root causes of human rights risks. A smart mix of cross-commodity collaboration in the same country, and of cross-country collaboration on the same issue could encourage new paths to solve persisting human rights issues.

5. TREAT FARMS AS A UNIT:

To ensure livelihoods and business sustainability. Assessing commodity supply chains separately does not provide insights into livelihoods at the farm-level.

Risks to livelihoods are a key concern across different agriculture supply chains. A large part of agricultural goods is supplied by smallholder farmers who have limited resources to compensate the impacts of crises. Brands that entered long-term relationships with these farms and seek to support their resilience should consider farms as a unit and assess their overall situation during the crisis. In response, brands can make better informed decisions for allocating support.

EXAMPLE

Coffee farmers in India commonly intercrop spices or trade in lumber to diversify their income. Brands should strive to understand the farms' financial positions more holistically, e.g., by understanding the timing of expenses and revenues and the harvesting cycle for other crops. Effective support from global coffee brands can then take novel forms, e.g., ensuring that activities that the farm needs can take place. Possible support can mean facilitating transportation (also for pepper workers), or facilitating access to markets (e.g., for the parts of the harvest that brands do not buy for themselves). Moreover, if applicable, brands can extend their sourcing commitments to additional commodities, e.g., by sourcing spices from coffee farms.

Focus on risks to livelihoods as the point of reference for support.

Although companies are actively working on rolling out human rights standards through their supply chain, more could be done to implement feedback processes from the farms, centralize the collection of data on human rights indicators, and assess how effective corporate activities are in reaching human rights goals. This requires to treat farms as a unit. Farmers might be able to compensate some challenges but not others, and brands may be able to support farmers in activities that are not directly related to their sourcing relationship.

Double down on sourcing commitments.

To ensure supply chain resilience may require brands to double down on sourcing commitments by sourcing additional crops from the same farms. Volatile market prices are a major concern so that farmers often seek a secondary source of income, e.g., by growing additional agricultural commodities. Global food and beverages companies can look for overlap with categories in their own commodity sourcing portfolio. Brands' supply chains are typically managed independently by commodity. However, in light of supply chain resilience, they should identify synergies to increase the economic support for farmers.

7. OUTLOOK AND NEXT STEPS The initial findings of this exploratory research should be followed by a field study on the ground. Such a study should contribute valuable insights from the perspective of workers, farmers, and local communities. The field study should answer the following questions:

Empirical data on the impact of COVID-19. Detailed information is required to understand the scope of the COVID-19 impact on the ground. This refers to smallholder farms, the situation of vulnerable worker groups (including temporary and migrant workers and women), the number of COVID-19 infections and long COVID cases, the effectiveness of measures to contain the spread, the access to healthcare, and the differentiation of risks for infection across different activities in the supply chain.

Verification of human rights risks. The study should verify whether the increased likelihood of human rights risks led to a deterioration of standards on the ground. This may concern, among others, child labor, wages and income security, working hours, sanitary provisions, or paid leave in case of an infection or long COVID.

Critical assessment of the crisis responses and medium-term challenges. A field study should shed light on the most urgent needs and longer-term concerns. On the ground data is a prerequisite for evaluating and optimizing future crisis responses, with the goal to ensure supply chain resilience and the sustainability of high human rights standards. This includes preparing for potential subsequent waves of COVID-19 and understanding the interdependencies between the socio-economic impacts of COVID-19 and medium-term prospects for human rights in the upstream supply chains.

Our research revealed key themes for supply chain resilience in relation to human rights standards that remain relevant beyond the pandemic.

First, it is crucial to acknowledge that global business practices have local human rights impacts. During the pandemic, maintaining supply chain operations and economic transactions proved vital for farmers and farm workers. Second, drivers of human rights risks are often interrelated. It is thus important to keep track of the socio-economic effects of the pandemic. Third, human rights risks on the farm-level accumulate from a combination of macro-trends (e.g., climate change), meso-trends (e.g., changing demand patterns and auditing processes), and micro-developments (e.g., lockdown policies and closed markets). When taking action to provide relief, companies need to take into account the situation prior to the pandemic (e.g., cases of informal workers who lack access to support schemes).

The following four themes merit further research and require the attention of global brands, traders and local suppliers in agriculture supply chains:

- Companies acknowledge that a living income is a key dimension for human rights protection. Global brands need to ask for more holistic and detailed data to investigate the scope of the risk of livelihoods during the pandemic.
- Brands should identify if workers in their supply chain are in urgent need of support for their livelihood, independent of their employment status. This should include contract workers, who play a vital role in agriculture supply chains, especially in situations of economic uncertainty such as the pandemic, but have less social security.
- Our research highlights the role of traders (global and local) as central and underestimated drivers of positive human rights impact. Traders should be actively involved in building up and implementing longer-term strategies to advance human rights.
- Beyond the immediate impact of the pandemic, climate change poses a constant concern for the social and economic resilience of agricultural supply chains. Measures to prepare agriculture supply chains for climate change should consider human rights an integral part of the response.

The COVID-19 pandemic emphasized that the livelihoods of workers in agriculture supply chains remain a key concern. From our initial research, we find that workers on farms and processing plants were able to cope because their expenses had gone down (e.g., due to restrictions of movement during the lockdown), because of material support (e.g., food), goodwill of employers who avoided lay-offs during the crisis (e.g., created new opportunities for work), and favorable market conditions (e.g., strong demand for spices and rising prices for coffee). Although all of these measures do provide relief, they do not systemically reduce the vulnerability of workers. Stakeholders need to develop more sustainable structural solutions to ensure social and economic resilience in global food supply chains.

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RECOMMENDATIONS

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FIGURE 1

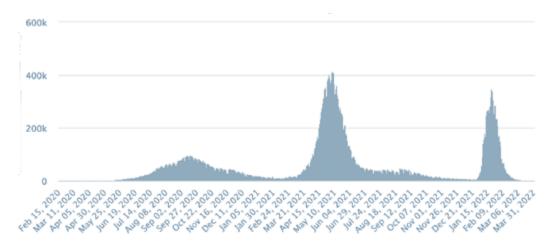
Fluctuation of world coffee prices from Nasdaq (in US\$), from 2017 to 2022



https://www.nasdaq.com/market-activity/commodities/kt%3anmx Assessed on April 1st, 2022

FIGURE 2

Daily New coronavirus cases in India from the beginning of the Pandemic till now



https://www.worldometers.info/coronavirus/country/india/ Assessed on April 1st, 2022

FIGURE 3

Map of sugarcane producing regions in India

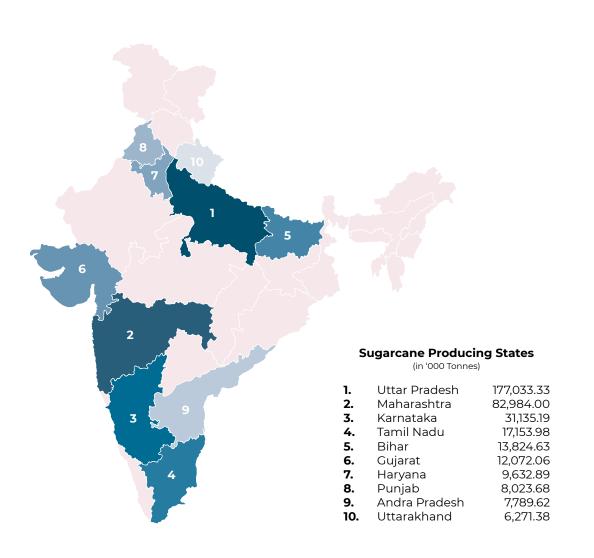
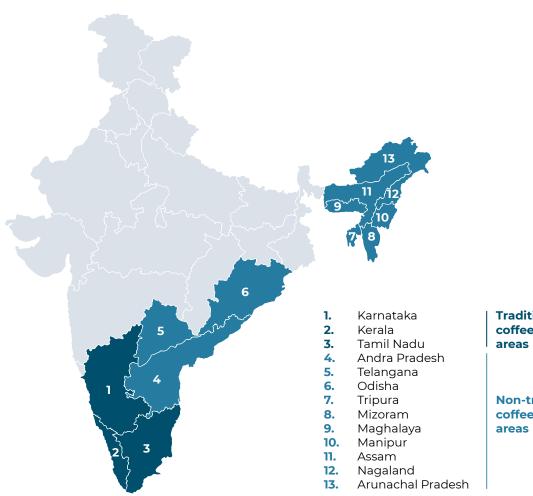


FIGURE 4

Map of coffee producing regions in India



Traditional coffee growing areas

Non-traditional coffee growing areas

https://dbon8wsz1nyjy.cloudfront.net/wp-content/uploads/2020/03/india-coffee-market-key-data-1-1024x707. png Assessed on July 14, 2021

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