

CASE STUDY

Improving Visibility in Cotton Supply Chains to Achieve Transparency

The Kappahl Pilot Project

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Transparency and Visibility in Cotton Textile Supply Chains

Companies are seeking to achieve supply chain visibility by increasing awareness of the actors, processes, transactions, and other activities operating in supply chains, as well as transparency through the disclosure of information related to those operations, transactions, and impacts. This report presents opportunities, challenges, and lessons learned from a pilot project undertaken by Swedish clothing retailer Kappahl and the International Institute for Sustainable Development (IISD) to engage with suppliers and map four garment supply chains and their sustainability profiles for greater visibility, transparency, and collaboration.

As consumers demand more sustainable products, retailers are under pressure to be aware of their environmental and social impacts. Moreover, the European Commission's proposal for a directive on corporate sustainability due diligence, introduced in February 2022, will require businesses to identify, disclose, mitigate, and end negative human rights and environmental impacts in their supply chains.¹ The French Anti-Waste for a Circular Economy Law includes binding legislation requiring textile and apparel companies to disclose environmental impacts in their supply chains as of January 2023.²

As pressures mount for companies to measure and disclose the sustainability of their processes and products, it remains challenging to share information on environmental, social, and

¹ For an outline of the European Commission's new due diligence rules, see: https://commission.europa.eu/business-economy-euro/doing-business-eu/corporate-sustainability-due-diligence_en

² See the text of the new law here (in French): <https://www.legifrance.gouv.fr/jorf/id/JORFTEXT000041553759/#:~:text=%C2%AB%20II%20est%20interdit%20de%20faire,de%20mati%C3%A8res%20recycl%C3%A9es%20effectivement%20incorpor%C3%A9es>



governance performance (e.g., greenhouse gas emissions) in a way that does not undermine competitiveness. Consequently, supply chain visibility and transparency are becoming increasingly important for companies to demonstrate their commitment to compliance and sustainability.

Some brands have started making their own operations more transparent; however, operations, processes, trade, and their impacts along the tiers of their supply chains often remain opaque. Collaboration among supply chain stakeholders is critical to collecting and sharing the information needed for supply chain visibility and transparency. Enhancing trust and collaboration across the supply chain represents a significant opportunity to enhance the sustainability and competitive advantages of all actors involved.

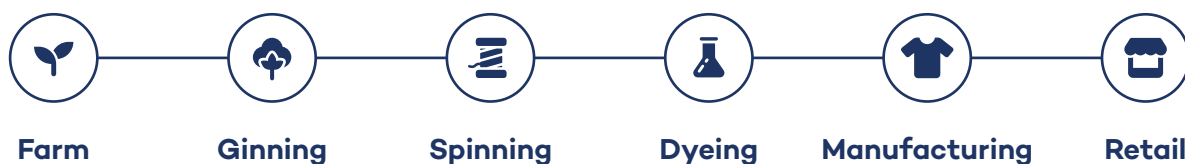
Case Study

Between 2020 and 2022, Kappahl partnered with IISD to undertake a pilot project to map the supply chains of four of Kappahl's Tier 1 garment suppliers in India, Bangladesh, and Sri Lanka for their Newbie line of organic cotton baby apparel. As part of its work on sustainable consumption and production, IISD identified the potential for collaborative data-sharing platforms to move toward environmental and social transparency in supplier operations. Kappahl wanted to engage with all tiers of its supply chain to increase the visibility of the environmental and socio-economic risks it might be facing and to support suppliers in addressing these risks and advancing sustainability.

To explore Kappahl's cotton supply chain, the project mapped the location and operations of upstream suppliers and solicited their engagement and collaboration in sharing information.

The pilot project involved an assessment of Kappahl's suppliers from farm to retail. Information was requested about suppliers' a) organizational profiles and business governance, b) material suppliers, c) certification and processes, and d) sustainability policies and indicators. The questionnaire was sent to Tier 1 suppliers, who were asked to answer the questions and forward the questionnaire to their input material suppliers (Tier 2) for the Newbie baby garments using SupplyShift, a supply chain risk management software. Each tier was asked to do the same to map the supply chain and collect information for each tier.

Figure 1. Cotton apparel supply chain stages



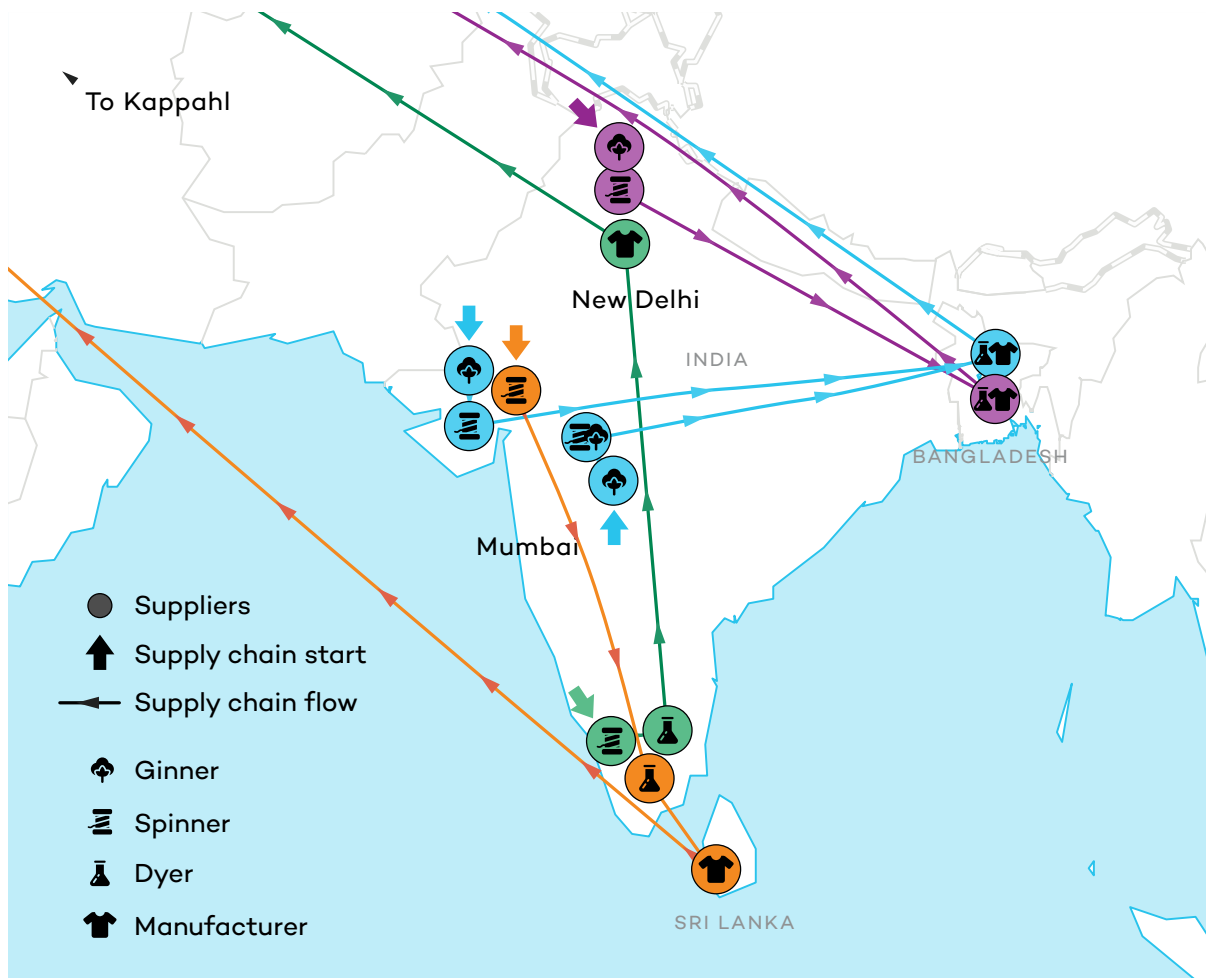
Kappahl India and Bangladesh supported their suppliers in completing the assessment via phone and email. A webinar was organized for Tier 1 and Tier 2 suppliers with Kappahl and SupplyShift to communicate the objectives of the assessment and provide technical support to complete and forward the questionnaire with the SupplyShift online platform.



Starting from its four Tier 1 suppliers, Kappahl was able to map three tiers down to the spinner or ginner. Ginner, who are vertically integrated into manufacturing and dyeing, were reached for two Tier 1 suppliers. Through the assessment, Kappahl collected information on issues such as organic certification, greenhouse gas emissions, water consumption, and wages.

Kappahl is now able to link this data with the farm- and household-level data it obtained from a farm project it conducted with the Organic Cotton Accelerator (OCA) and a spinner-ginner. Kappahl is a member of OCA, which is a multistakeholder initiative that convenes the cotton sector to advance organic cotton’s potential to improve farmer profitability and protect ecosystems. The implementation of their monitoring and evaluation system was supported by IISD through the SupplyShift platform, which was used to collect and aggregate farm and household data for improved data quality, analysis, and reporting to brand members with farm projects.

Figure 2. Map of Kappahl cotton supply chains for select Newbie garments



Note: Colours denote four Kappahl supply chains for organic cotton Newbie garments.



Results: Opportunities and challenges

Opportunities

Enhanced Visibility

As a result of the pilot, Kappahl was able to enhance visibility within its supply chains. It was able to identify its Tier 1 suppliers' names and locations, as well as their Tier 2 and 3 suppliers' roles for the select Newbie garments. This enhanced visibility can assist Kappahl with identifying supply chain risks; for example, knowing the supplier locations can help identify potential supply risks due to climate change-related extreme weather events or pest infestations in those places. Measures can then be taken to address these risks by collaborating with suppliers. Having this supply chain visibility allows Kappahl to partner with ginners or spinners to reward farmers for organic compliance and agricultural practices with positive environmental and social impacts, as they do in their current project with OCA.

Building Trust and Collaboration

Building trust between supply chain actors is fundamental for meaningful collaboration to advance sustainability. During the pilot project, Kappahl opened conversations about sustainability issues, such as climate change, wages, and organic production, with its suppliers via the supplier questionnaire. Kappahl India and Bangladesh also supported their suppliers in completing the assessment by phone and email. Kappahl shared its motivation for inviting suppliers to join its sustainability journey to try and establish a collaborative spirit. By sharing its corporate sustainability objectives, Kappahl signalled to its supply chain stakeholders that adopting more sustainable practices will help them meet their corporate objectives and maintain their business relationships.

Building Collective Intelligence

By collecting information from across its supply chains, Kappahl built collective supply chain intelligence that can benefit all supply chain stakeholders. For example, Kappahl collected information and documentation about processed and traded organic cotton that could help in assessing verification activities and making adjustments to improve their effectiveness. Sensitive information can remain confidential by aggregating the information to reveal supply chain issues and trends. Collective supply chain intelligence can directly benefit supply chain stakeholders, motivating them to share information. Furthermore, supporting documentation from suppliers, such as invoices, certificates, and shipping documents, enhances the validity of the information shared. This type of documentation provided Kappahl with confidence in the validity of the answers it obtained from its suppliers.

Challenges

Data Collection and Quality

The questionnaire was designed to enhance supply chain visibility and shed light on the sustainability profiles of Kappahl's suppliers. The questions tried to capture essential information to keep data requests from suppliers reasonable. Establishing which questions to



ask and how to ask them was an important step requiring careful consideration. For instance, sensitive questions needed to be crafted appropriately to get accurate answers, and all questions remained voluntary to ensure that the questionnaire moved through the tiers more easily. Additional verification measures may be required to improve the quality and validity of the supplier information collected, which can be costly (i.e., physical audits). Technological advances and novel approaches (e.g., remote sensing and community science monitoring) can lower data validation costs. Nevertheless, integrating various supply chain data collection efforts can be challenging and costly.

Supplier Participation

Kappahl faced significant challenges getting its middle tiers (Tiers 2 and 3) involved in the pilot project. Suppliers were not used to receiving such requests, and getting them to log into the platform and answer assessment questions and provide complete answers was more difficult as the questionnaire moved down the supply chains. Motivating their participation required more effort (i.e., emails, phone calls, and a webinar) than expected to support them in sharing the requested information. Supporting documentation, such as final chain-of-custody documents, to validate answers often took additional time to receive. The use of the online platform to answer the questions was also challenging for most suppliers, who had little to no experience with online platforms such as SupplyShift, particularly in the lower tiers. Platform accessibility also made supplier participation more difficult.

Supply Chain Mapping

Many suppliers who participated in the pilot project expressed that this was their first involvement in a supply chain mapping effort. Nevertheless, the apparel sector has been demanding more visibility and transparency in its supply chains, and we can anticipate that suppliers in Kappahl's supply chain will receive similar requests from other brands in the future. This could result in supplier information request fatigue, lowering the quality of their responses. Coordinated information requests from clothing manufacturers and retailers would mitigate this potential challenge. Streamlining and standardizing (i.e., standard questions) supply chain visibility and transparency processes could assist with maintaining supplier engagement.

Lessons Learned

Supply Chain Stakeholder Collaboration

Building trust and collaboration within supply chains is critical for increased visibility and transparency. This can be done by clearly communicating the advantages of these types of supporting initiatives. Suppliers need to understand why they are being asked to share information and how it will benefit them. More specifically, this could include communicating how the data collected across the supply chain will benefit and be shared with them. The information collected across supply chains could be strategically aggregated and shared with all supply chain stakeholders to add value to the information collected while maintaining data privacy.



Providing suppliers with a means to offer feedback on the supply chain mapping effort could also build trust and collaboration by ensuring that opportunities are provided to them to improve the process. The brand or lead firm must play an active role in engaging all supply chain stakeholders and explaining why their data collection efforts are important to maintaining the business upon which all tiers of the supply chain depend. Training and support for suppliers will be needed to convey the purpose and approach for the supply chain visibility and transparency effort. In the case of the pilot project, Kappahl communicated why it needed assistance from its suppliers. It also provided guidelines for using the SupplyShift online platform. Enabling supply chain collaboration can take time and requires a long-term commitment.

Collecting Information on the Right Key Performance Indicators (KPIs)

Selecting the right KPIs is critical to determining what information needs to be collected and how best to collect it. The language, definitions, and units of measure used to collect information must be well understood to facilitate the data collection process. Testing the survey tools with Tier 1 suppliers can be insightful for adopting terms and units that will be consistently understood as the questionnaire moves down the supply chain. Tailoring the questions to the supplier at various tiers can also improve comprehension and facilitate data collection. This could mean collecting data in variable units that can be converted using the technological platform. Another strategy includes using a staggered data collection approach to keep the information requests manageable for suppliers and iteratively improve the data collection process. For instance, the data collection effort could start with collecting supplier names and addresses to map the supply chain and then move on to more targeted information requests to establish the sustainability profile of the supply chain.

Selecting the Right Supply Chain Mapping Technology

Kappahl was able to collect sustainability data throughout its supply chains using supply chain mapping technology. Technological platforms can assist with overcoming data collection and privacy concerns associated with supply chain mapping by maintaining the confidentiality of the information collected and adding value to it via aggregation. The technology should include the functionalities needed to achieve the objective at hand. Selecting a technology that is sufficiently flexible for all suppliers is also important to ensure that data collection requests are as simple as possible. Meeting suppliers at their level of technological proficiency determines how best to support them in adopting a technology (i.e., guidelines, instructional videos, etc.). Regardless of the technology used, resources are needed to follow how questionnaires make their way down the supply chain to facilitate timely interventions and to maintain the mapping effort. Technological platforms that track how information requests progress through supply chains can be helpful. By starting small and scaling up over time, lessons learned can be applied along the way.

Supply Chain Visibility

Kappahl was able to map the supply chains of four Newbie baby garments to the spinner or ginner, in some cases making it possible to connect with farm-level data. Although this may not always be possible, bottom-up and top-down mapping can provide greater potential to get full supply chain visibility. This is particularly true for the cotton sector, where many



smallholder farmers are involved in supplying cotton to different supply chains. Partnering with entities that interact directly with stakeholders in the lowest tier can be essential to enable full supply chain transparency. In the case of the cotton sector, ginner and spinner with direct relationships with cotton farmers could facilitate end-to-end supply chain mapping efforts. As experienced by the Kappahl supply pilot project, top-down supply chain mapping efforts get more difficult as you move down a supply chain, and complementing it with bottom-up mapping can improve the potential for full supply chain visibility and transparency. Nevertheless, bottom-up supply chain mapping is risky as there are no guarantees that it will connect with top-down mapping efforts. Some level of visibility may be required to improve the probability that starting from both ends of a supply chain will result in full supply chain mapping.

Standards and Documentation and Compliance

Voluntary sustainability standards (VSSs) (e.g., Organic, Better Cotton, Global Organic Textile Standard) can facilitate supply chain visibility and transparency in several ways. Frequently seen as pseudo-governance systems for sustainability within supply chains, VSSs work toward the adoption of more sustainable production practices. To do so, they often facilitate the adoption of common indicators for producers and supply chain actors to implement practices that can improve environmental and social conditions and, in some cases, measure their performance. VSSs often require standard-compliant products to be tracked through supply chains via chain-of-custody documentation, providing a place to start mapping supply chains in companies consuming standard-compliant materials. Additionally, VSSs often require supply chain stakeholders to document various aspects of their operations and transactions to provide assurances that the products traded are standard compliant. These documentation requirements can greatly ease supply chain information requests from VSS-compliant suppliers.

Conclusion

Supply chain visibility is becoming increasingly important for achieving the transparency needed to meet stakeholder demands for more sustainable products and complying with emerging regulations. In the Kappahl supply chain pilot project, IISD achieved greater supply chain visibility for four Newbie garments via supply chain mapping and supplier engagement efforts using SupplyShift software. It opened the possibility for Kappahl to achieve full end-to-end supply chain visibility by linking with the farm and household data obtained through Kappahl's farm project with OCA.

Enabling trust and collaboration among supply chain stakeholders was accomplished by enrolling them in Kappahl's sustainability journey. The information requested from suppliers was kept to a minimum but could also be approached in stages by first mapping the supply chain and then soliciting more targeted information. It is critical to select easy-to-use, flexible technology: this makes a significant difference in enabling supply chain visibility by meeting suppliers at their level of technical proficiency. Bottom-up and top-down supply chain mapping efforts could improve the potential to achieve full supply chain visibility and transparency. VSSs can be leveraged to support supply chain mapping efforts through existing documentation requirements that companies fill out in order to remain standard compliant.

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