ADDRESSING SCP IN THE FASHION AND APPAREL SECTOR

SCOPING STUDY - EXECUTIVE SUMMARY
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**Acknowledgement**

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<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>BAT</td>
<td>Best Available Technology</td>
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<td>EU</td>
<td>European Union</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
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<td>GIZ</td>
<td>Gesellschaft für Internationale Zusammenarbeit</td>
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<td>GPP</td>
<td>Green Public Procurement</td>
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<td>NGO</td>
<td>Non-Governmental Organisation</td>
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<td>RMG</td>
<td>Ready-Made Garments</td>
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<td>SCP</td>
<td>Sustainable Consumption and Production</td>
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<td>SCPF</td>
<td>Sustainable Consumption and Production Facility</td>
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<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
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<td>SME</td>
<td>Small and Medium Sized Enterprises</td>
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<td>SPP</td>
<td>Sustainable Public Procurement</td>
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<td>UN</td>
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EXECUTIVE SUMMARY

MARKET ASSESSMENT AND BUSINESS EVOLUTION

The textile and clothing chains are composed of a wide range of sub-sectors covering the entire production cycle from the production of the raw materials (fibres) to semi-processed (yarn, woven and knitted fabrics with their finishing processes) and final/consumer products (carpets, home textiles, clothing) and industrial use (technical textiles). Similarly, the global leather sector comprises multiple industries starting with the preservation of raw hides and skins, the preparation, tanning and finishing of leather, and the production of a range of leather consumer or industrial products. Resource consumption and environmental concerns are important factors encompassing the whole life cycle including agricultural fibre and raw hide production, the chemical and tanning industry, yarn and fabric manufacturing, product manufacture, the actual usage phase of products, and their end of life. With the large-scale outsourcing of textile and leather manufacturing to countries with cheap labour pools and less evolved environmental regulations mainly in Asia, these aspects and the risks associated with them have been transferred as well. As per the World Trade Organisation Report World Textile and Apparel Trade in 2017, seven out of the top ten exporters of textiles and clothing, and four out of the top ten exporters of leather are located in Asia (Lu 2017). China holds the global leading export role for leather shoes and leather consumer products with more than 35% and 40% respectively. In Bangladesh, Cambodia, Myanmar and Pakistan these sectors have become important sources of revenue and employment. Today’s supply chains are closely interlinked, stretching their intricate networks across several countries and continents. In 2018, the world production of all fibres rose to 111 million metric tons, increasing by four million tons against 2017, and by 35 million tons over the past decade. Around 80 billion new garments are produced globally every year. Average consumption has nearly doubled, from 7kg to 13kg per person, in 20 years (Textile Beat 2015; FAO 2013). If the global population rises as expected to 8.5 billion people by 2030 and the GDP per capita grows at 2% per year in the developed world and 4% in the developing world, the overall apparel consumption will rise by 63%, from 62 million tons in 2017 to 102 million tons in 2030 - an equivalent of more than 500 billion T-shirts (Boston Consulting Group 2017).

Consumers’ purchase decisions will play a more important role than ever regarding sustainability in the textile and leather sectors. Consumption decision can either support the emerging sustainable fashion/apparel industry or confirm the status quo. This is true for private consumers, business to business transactions and public consumption patterns. Whilst there is a trend for consumers to increasingly pay attention to attributes other than price and design, such as consumer safety, quality, but also overall sustainability aspects, “fast fashion” remains a real phenomenon. Studies show that while the volume of production (in terms of pieces of clothing) has doubled between 2000 and 2015, the clothing utilisation rate (defined as average number of times a garment is worn before it is thrown out) has significantly dropped, with the drops being proportionally higher in emerging fashion markets such as China with a 70% drop over the last 15 years (Euromonitor International 2016). Studies indicate that the “fast fashion” phenomenon have emerged in several Asian Tiger countries (Cheng et al. 2015). With fast growing middle classes and increasing portions of disposable income, the domestic consumer markets for textile and leather of formerly purely export-oriented manufacturing countries are increasingly moving in the interest of domestic and international brands. China has established itself as a major importer of textile and leather products and is increasingly outsourcing its production. Chinese apparel sector entrepreneurs continue investing in the establishment of own production capacities in countries within and outside the region (for example in Bangladesh, Myanmar, Vietnam, Ethiopia). By 2025 more than half of apparel and footwear sales will originate outside of Europe and North America (Business of Fashion and McKinsey 2018). In the context of the overall Asian apparel sector, the countries in the Central Asian region (Tajikistan, Kazakhstan, Uzbekistan, Kyrgyzstan, Turkmenistan) at present, play the role of sourcing bases for primary inputs into the apparel value chains such as cotton, silk, wool, skins/hides, though efforts have been launched to re-establish the once thriving apparel industry.

While Europe and North America accounted for 60% in 2011, by 2025 the share of Western markets’ share will drop to 45%. The Asian online apparel market alone is projected to reach USD 1.4 trillion by 2020. The demographic and economic developments in the new markets have led to changes in consumer patterns, comparable to those observed in the traditional consumer markets in Europe and the USA. This has led to the emergence of challenges and concerns in the region that Western markets have been facing since the start of mass production of cheap clothing, such as how to cope with the growing amount of apparel at their end of life, increased resource use and waste/wastewater generation during production. According to estimates by the Circular Fibres Initiative, USD 500 billion value is lost every year due to clothing that is barely worn and rarely recycled (Circular Fibre Initiative 2017).

The prevalent, almost linear model of producing, distributing and using clothing implies the use of a growing amount of non-renewable resources which are extracted to produce clothes that are barely used and that end up in landfill or incineration shortly after being purchased. The impacts associated with this model stand in no relation to the ultimate services rendered by clothing. In a business as usual scenario, the fashion industry will consume a quarter of the world’s carbon budget by 2050. Apart from being wasteful on resources, the industry is also polluting. With reference to the issue of plastic pollution, clothes release half a million tonnes of microfibres into the ocean every year; this is equivalent to more than 50 billion plastic bottles. At this point, it is not yet clear whether microfibres can be cleaned up at all, or be prevented to enter food chains (Ellen MacArthur Foundation 2017b).

Considering the sector’s growth forecasts by the Global Fashion Agenda and Boston Consulting Group, the overall water consumption of the sector is likely to increase by 50% from 79 billion m3 in 2015 to 118 billion m3 in 2030. Similarly, emissions of CO2 will rise by 63% from 1,715 million tons to 2,791 million tons, while waste generation will escalate from 92 million tons to 148 million tons, an increase of 62%. Down the line, this will also mean an increase in the amount of wastewater generated, chemicals consumed and discharged, land required for growing natural fibres (in turn affecting the use of pesticides and herbicides), as well as demand for petroleum-based feedstock for synthetic fibres; all with potential direct and indirect impacts and costs to economies. But these developments also have a social angle. The textile/garment sector accounts for about 34% of the total employment in the manufacturing sector across key Asian production countries. In many Asian nations, however, the sector’s minimum wages

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Figure 1 – Global material flows for clothing in 2015

![Image of material flows for clothing](image-url)


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1 Recycling of clothing into the same or similar quality applications.
2 Recycling of clothing into other lower-quality applications such as insulation material, wiping clothes, or mattress stuffing.
3 Includes factory effluents and wastewater leakage.
4 Fibres microfibres shed during the washing of all textiles released into the ocean.
are less than half of what can be considered a living wage. Between the workforce, women make up the majority (e.g. up to 83% of workforce in Bangladesh) raising the issue of equal pay which, according to studies, show considerable scope for improvement. Going by the average number of 5.6 injuries per 100 workers per year in the industry, the number of recorded injuries is projected to reach 1.6 million by 2030 compared to 1.4 million in 2015 according to the ‘Pulse of Fashion Report 2017’ by the Danish sustainability platform Global Fashion Agenda and Boston Consulting Group. This number does not take long-term occupational health impacts as result of work environment conditions and exposure to occupational hazards (e.g. chemical, noise, heat-stress, ergonomic strains) into consideration (Boston Consulting Group 2017).

Drivers of Change

Looking at the likelihood of major disruptions in the sector over the next ten years, 40% of respondents in a survey with international experts and practitioners in apparel manufacturing and retailing as well as robotics and sustainability expressed the feeling that sustainability will become a key purchasing factor for mainstream apparel consumers (Anderson et al. 2018). Recycling and reuse are two concepts that are gaining interest (Hermkens et al. 2018). In 2016, however, just around 1.5 to 1.6 million tons, i.e. about 10% of textile waste recycled (Recycling magazine 2016). New business models are expected to emerge around service-based fashion, e.g. rental of clothing, in order to increase the usage of clothing items over a lifetime (particularly for items with low usage). The demand for textile sector products will grow; at the same time, consumers will become more demanding with regards to changes in the product itself (functional, fast, functional, safe), as well as their production (sustainable, ethical, safe). In its ‘State of the Fashion Report 2018’, McKinsey points out that ‘with information and the ease of comparison at our fingertips due to digitisation and commodification, consumers are becoming less brand-loyal. But while they are very price-sensitive, they also base more of their purchasing decisions on whether a company’s practices and mission align with their values’ (Business of Fashion and McKinsey 2018). Studies indicate that 66% of global millennials are willing to spend more on brands that are sustainable (Nielsen 2015). The worldwide alignment of economies towards achieving the Sustainable Development Goals (SDG) by 2030 has already led to a corresponding reorientation of concerned governing structures in the manufacturing countries covered in the study. Apart from monitoring the extent and progress of meeting the SDGs, policies and programmes have been developed and translated into action plans addressing sustainable consumption and production (SCP) aspects. As of late, also circular economy approaches have been emerging and making inroads into the textile and leather sector. Sustainability evolves to be an integral part of the planning system where circular economy principles are embedded throughout the value chain. Till date, specific efforts on the ground are limited to a few product lines by well-known international brands, but also initiatives in the domestic markets themselves are becoming visible (e.g. advancement of green fashion design in national design schools, launch and advertisement of products made of recycled textile materials). The European Commission (EU) adopted an ambitious Circular Economy Action Plan in 2015 outlining measures that will help stimulate Europe’s transition towards a circular economy, e.g. through reinforced rules and new obligations to collect waste, including textiles, separately. In March 2019, the EU adopted a report which sketches out future challenges shaping our economy, and paves the way towards a climate-neutral, circular economy where pressure on natural and freshwater resources as well as ecosystems is minimised (European Commission 2019).

The type of drivers for change and their origin vary from country to country. The apparel industry is going through a decisive era of major consumer, channel and supply shifts while suffering from increased economic volatility. Industry players face rising production costs (also due to the increasing demand to internalise costs for social and environmental performance management), and pressure through shortening turn-around and delivery times. The way of doing business is also changed by disruptive technologies, digitisation and automation making inroads into textile value chains (Business of Fashion and McKinsey 2018). Until not so long ago, it was deemed impossible that sew-robots would take over the task from workers in ready-made garment (RMG) factories. With the possibility of such automatization of production, manufacturing hubs based on large cheap labour pools might become redundant in the future. Not surprisingly, of late, concepts such as near-shoring (defined as creating production closer to the end user markets) has become an issue of discussion but also of concern for those market who would lose their competitive edge (Anderson et al. 2018). Whilst the near and on-shoring approaches bear potential opportunities for manufacturers in Eastern Europe, the Mediterranean, as well as nearby Africa (Ethiopia), countries who have built their business model on low-cost labour-intensive production, look at such developments with concern.

SCP, Too Slow in Production and Consumption Cycles

The review of documents and interviews conducted indicate that the enabling SCP policy framework is at different levels of maturity and comprehensiveness in a certain number of countries. Commitment towards SCP and the SDGs apparent in all countries, specific SCP policies are only available in a few. Despite the economic importance of these sectors in most of the countries, no comprehensive sector-specific SCP policies and/or implementation frameworks are in place and often lag behind in their adaptation schedules. This is especially problematic considering the fast-changing realities. Green/Sustainable Public Procurement (GPP/SPP) concepts have already been established in some of the countries under purview, though to date, textile or leather products have not yet been explicitly referred to in these documents, as is the case in e.g. the EU Green Public Procurement Criteria for Textile Products and Services (Dodd and Caldas 2017).

Eco-labels function as a sort of third-party guarantee that products and services bearing the label meet the environmental and social criteria specified in a procurement. They can then prioritise these products and services among others that are not labelled. This is expected to provide a strong incentive for manufacturers to adopt green practices and deliver sustainable goods of...
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superior value to consumers. Eco-labeling schemes are actively propagated or proposed in several participating countries. The added-value of having a domestic eco-label will need to be ascertained further in case of textile and leather products. The export-oriented segments of the sectors widely refer to international labels and/or certifications to enhance their brands’ products or their standing as suppliers to international brands. To this regard, international and domestic brands can use the same labels regardless whether they are catering to the international or domestic markets. As per anecdotal evidence, domestic manufacturers do not yet use eco-labels in domestic markets. Countries such as India, Indonesia and Thailand (the latter not being amongst the countries reviewed) have already developed and published textile and leather related national eco-labeling schemes and use the same labels in international and domestic markets. The desk research indicates that so far only very limited studies have been conducted for the Asian fashion/apparel markets concerning the extent of sustainability performance aspects that are being considered in purchase/assessment-related decisions. According to their findings, sustainability aspects only play a low priority role, except for a very small group of fashion/apparel consumer segments. At the same time, there appears to be agreement in the studies that if more information was accessible to consumers, preferences for sustainability aspects would increase, both with regard to production and consumption.

Conformance to supplier code of conducts set by international buyers has been and continues to be a key driver for change and adoption of sustainable production approaches and practices in the textile and leather sectors, particularly in those segments catering to the export markets. One might argue that initiatives by international brands have even partly been the driving force behind the creation of the fashion/apparel segment in few countries. Regulations and their enforcement often remain ineffective due to shortcomings in the respective national enforcement and governance framework (e.g. limited capacities, corruption, missing legal references). Efforts to strengthen the national governance framework and streamline/enhance the national enforcement capacities are underway, often supported by bi-multilateral development partners. In contrast to environmental standards, social standards, covering working conditions and labour rights, are better anchored with the respective national policy frameworks and corresponding sectoral guidelines in all countries. However, as in the case of environmental performance standards, initiatives of international brands also have been playing a crucial role in advancing these concepts, along with the efforts of the national authorities.

The degree of action and sanctions against poorly performing industry players differs between countries and often within countries. While tanneries in the state of Tamil Nadu have to strictly comply with zero liquid discharge; many units in Gujarat, India and Odisha Pradesh are only now in the process of adequately managing their wastewater. In Bangladesh, many textile units still function without a functional wastewater treatment system though legally required for renewing one’s environmental license. According to the China National Textile and Apparel Council the country’s enforcement agencies have tightened their grip on environmental issues. Extensive audits and reviews of factories were initiated, which led to the shut-down of nearly 40% of textile manufacturing facilities in China (Yan 2019). However, there is growing concern among observers, that Chinese entrepreneurs might relocate production to nearby manufacturing countries to escape this tight enforcement grip. (Hossain 2019; Beckmann and Lange 2019)

The sustainability performance varies by the type of segment within the value chains and company size. Larger factories and a few sustainability-focused niche players are more advanced, while Small and Medium Enterprises (SMEs) are still facing challenges for more than half of the industry rate lowest. Despite the fact that the textile and leather sectors are commonly categorised as “most polluting industry” in almost all countries covered, only the larger factories are likely to appear on the radar of enforcement agencies. Factories at the product manufacturing level (e.g. RMG, shoe factories) have been under scrutiny by international initiatives for much longer time than their sub-suppliers (dyeing units, tanneries). In addition, the availability, maturity and efficiency of the respective social and environmental governance frameworks are distinctly different across the countries reviewed. While in the past, international buyers paid particular attention to social and environmental conformance aspects at the product manufacturing stage (RMG, leather product manufacturing) or raw material level (e.g. organic cotton) in both value chains, such efforts have started to systematically look at and address these in the whole value chain (Hossain 2019; Paul and Durairaja 2019).

In this context, SMEs require special attention: they constitute an important backbone of the two sectors in all the participating countries where they mainly cater to the domestic market, but also play a minor role as sub-suppliers for the export-oriented industry segments. All countries have special policies in place which support SMEs to ensure their continuous economic contribution. Ensuring adequate social and environmental performance poses a challenge, both in terms of technical and financial capabilities as well as local support structures. Vietnam has implemented a comprehensive system which aims at including SMEs in the fold of sustainable performance improvement. In context of GPP/SPP, special attention is being paid to ensure equal access and participation of SMEs. For example, India has established a public procurement system which specifically reserves a percentage (20%) of textile and leather products to be sourced from SMEs.

SUGGESTED FOLLOW UP APPROACH FOR ADDRESSING SCP IN THE FASHION AND APPAREL SECTOR

It is widely acknowledged that addressing sectoral SCP issues and contributing to a sustainable development will require a multi-stakeholder approach and a new pattern of thinking. To this regard, a considerable number of national and regional SCP related initiatives (including several with sector focus) are already being implemented. Given the differences in settings and requirements in the participating countries, the proposed way forward calls for a differentiated approach and tailored approaches, building on existing initiatives and experiences in the region, and complementing them with experience from outside the region (e.g. Europe).

To facilitate exchanges and collaboration between the various stakeholders and beneficiaries for joint transformative actions on the transition to SCP in this critical sector, the following actions are suggested:

1. A first step should be to define and agree upon a common definition of the term “fashion/apparel sustainability” and the criteria it encompasses. Currently, a challenge lies in the variety of perceptions and lack of a single common definition of fashion/apparel sector and its scope/degrees of sustainability from a SCP perspective. This could then be used to benchmark national policies and regulations in this regard.

2. Whilst there are several progressive policies and regulations in place in some of the countries, changes and innovations towards more sustainability in the sector are largely driven by private sector initiatives, labels and compliance specifications. One such example is the LWG label that provides a reference standard for good compliance in the leather industry that functions as a signal for international corporations to engage in business with a supplier or not. It will be important to work on lessons learned from private labels, in terms of performance standards, benchmark figures and so on, that can be drawn for public initiatives that all too often still focus and rely on end-of-pipe solutions. The discussion will help policy makers to define industry goals and their translation into national legislation.

3. The development of a criteria catalogue for an eco-label in the region seems necessary drawing lessons from the EU label as well as from countries within the region that already have established sector-specific eco-labeling schemes (e.g. India, Indonesia and maybe Thailand). The scoping study shows the lack of knowledge and transparency regarding the sustainability of products as one major reason for consumers not to prefer sustainably produced products over conventional ones. In order to increase transparency and trust, eco-labels can lead the way, as has been done in the EU with its eco textile label. To this regard, follow up work should consider liaising with GIZ FABRIC, coordinating/aligning its own regional consultations with those envisaged under the regional FABRIC programme and engaging with Eco-label initiatives in other participating countries such as in Mongolia.

a. The process of the development of the criteria catalogue will further serve the ambition to include provisions for textile and leather into
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5. [related text]

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BIBLIOGRAPHY


Beckmann, Marc and Werner Lange 2019: Relocation of Chinese entrepreneurs.


European Commission 2019: Report from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions. on the implementation of the Circular Economy Action Plan.


Hemkhaus, Morton; Jürgen Hannak; Peter Malodobry; Tim Janßen; Nora Sophie Grifahn and Christina Linke 2018: Circular Economy in the Textile Sector. Study for the German Federal Ministry of Economic Cooperation and Development (BMZ) and the Partnership for Sustainable Textiles. Berlin: GIZ.

Hossain, Md I. 2019: Interview with Jürgen Hannak: Relocation of Chinese entrepreneurs; Sustainable buying.

Lu, Sheng 2017: 5 key trends in world textile and apparel trade.


Yan, Yan: Social Responsibility of the China National Textile and Apparel Council. New York, January 2019,