

Asia Future Lab for Innovation and Policy

Background Note: Textile and Fashion in Asia

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About the Asia Future Lab

The Asia Future Lab for Innovation and Policy – a collaborative partnership between [SEED](#) and [GO4SDGs](#) – offers a platform for green SME stakeholders, such as policy makers, financiers and entrepreneurs, to make the textile and fashion sector ready for 2030 by developing future-proof solutions for today's challenges. The lab focuses on the clothing and apparel industries and addresses challenges along the value chain from production to consumption. The participatory lab process will connect policy makers, intermediaries and SMEs in a co-creation setting in order to develop tailored solutions in five action areas such as Innovation, Non-Financial Support, Finance, Policy and Market. The co-created solutions will provide concrete action items in how to better support Asian green SMEs applying circular technologies or business models operating in the **textile and fashion sector**. To drive this systematic change, the participants of the lab will discuss priority areas such as shifting consumption patterns, improved practices and infrastructure investments.

The Asia Future Lab was designed to engage a community of 30-40 participants leveraging the expertise of key green SME stakeholders across the region. The Asia Lab is part of a Global Lab Series that engages green SME stakeholders in the Agri-Food and Textile-Fashion sectors across Africa, Asia, Latin America and West Asia. The practical insights of the regional labs will inform a New Green SME Action Agenda supporting the global advocacy efforts of the growing green SME community leading the way for future SME policies and frameworks.

The Asian textile-fashion SME sector context

The textile-fashion sector is one of the world's key industries, employing more than 300 million people, many of whom are women. The textile-fashion sector remains crucial to realise the ambitions set out in the Sustainable Development Goals (UNEP, 2021b). However, the textile-fashion industry is a major contributor to global environmental problems. Locally, the fashion and textile industries hurt water quality and people's health through the use of chemicals. Studies have found that the fashion industry uses or contaminates 215 trillion litres of water (Quantis, 2018). A pair of jeans alone may require as much as 10,000 litres of water from production to the market. This is as much as the average person drinks in 7 years (Khamis, 2022). The textile and fashion industry is estimated to be responsible for between 2 and 8% of Global Greenhouse Gas Emissions (Quantis, 2018, Ellen MacArthur Foundation, 2017). This is increasing, as people are consuming more rather than less. Today, the average consumer buys 60% more clothing and wears each item 36% less often before discarding it than they did 15 years. Combined with low recycling and re-use rates, this trend increases the amount of waste the textile industry creates (UNEP, n.d.). Increasing the number of circular practices, such as repair, refurbishment and recycling, could reduce the environmentally harmful impact of the industry by 143 million tons of greenhouse gas emissions by 2030 (UNEP, 2021a).

Small- and medium-sized enterprises (SMEs) comprise the majority of businesses in the textile industry. They engage in activities across the textile value chain and include small-scale cotton farmers, fibre, yarn and fabric producers, dyeing and finishing facilities, apparel manufacturers and recyclers. Social

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groups that are marginalised in formal employment, such as women and rural migrants, represent a large share of their workforce. The growing push toward sustainable and circular practices in the textile industry leaves many SMEs behind as they struggle to find the resources to engage in sustainable practices (UNEP, 2020).

In Asia, the textile-fashion sector is particularly strong. In 2021, China remained the top-ranked global textile exporter. With exports worth approximately 118.5 billion USD, China accounts for more than half of Asia's total export market (Mordor Intelligence, 2022). However, other Asian countries are increasing their market share. Especially Asia's graduating Least Developed Countries, namely Bangladesh, Cambodia, Lao PDR; Myanmar and Nepal, have registered impressive growth in recent years, accounting for 8% of world Textile & Clothing exports and about 14.5% of global apparel exports (WTO et al., 2022). This emerging shift can be further illustrated with the example of the leather industry. Asia is the global export leader with a share of nearly 60%. China, Vietnam, Indonesia and India account for 50% of total exports. However, China's market share has decreased by 10% since 2010 due to higher labour costs and improved environmental regulation. This has opened the way for other countries to catch up, thanks to cheaper labour and high-quality products (SWITCH-Asia, 2019).

Slowly improving environmental standards are implemented as the adverse effects of the textile-fashion sector are increasingly felt across Asia. For example, China's Ministry of Environmental Protection recently published data that the textile industry was the third-largest source of industrial wastewater. This represents 10% of China's total industrial wastewater discharge (Ravelo, 2018). Moreover, the chemicals used in the manufacturing and processing of textiles are harmful to the ecosystem, threaten biodiversity and harm human health. For instance, producing one kilogram of cotton garments requires as much as 3 kilograms of chemicals, much of which enters the environment due to run-offs and inefficient production techniques. A major challenge faced by the textile-fashion sector in Asia is that it stands at the end of a long and complex system of global supply chains. While big fashion brands begin to green their activities on their end of the supply chain, these greener policies and ambitions do not reach the beginning of the supply chain that often lies in Asia (Fashion Revolution Singapore & Oxford Development Consultancy, 2021).

The Asian textile-fashion sector is characterized by a highly fragmented market. Across the region, SMEs account for 99.6% of all enterprises and employ more than two-Thirds of the workforce. Still, they only account for one-Third of the GDP as some larger companies concentrate on profit-generating activities. Moreover, SMEs serve the national and, even more so, the local markets. Less than 20% of SMEs across the region reported selling their products on international markets (Asian Development Bank, 2021; Mordor Intelligence, 2022). SMEs often work as specialised sub-supplier units and engage in spinning, weaving and finishing mills, as well as textile and garment factories. Generally, almost 80% of employees in SMEs in the Asian textile-fashion sector are women, often in countries' rural areas (SWITCH-Asia, 2019).

Over the past decades, the region has made major economic progress, which has resulted in increasing consumption especially from within the growing middle class. Based on this growing number of consumers, the local fashion markets have gained momentum, especially in Vietnam, the Philippines, Indonesia, Malaysia, Thailand and Singapore. Moreover, studies have found that there is a growing awareness for sustainability among Asian consumers. According to a recent poll, 80% of the respondents reported that they were willing to pay more for goods with a better social and environmental impact (Fashion Revolution Singapore & Oxford Development Consultancy, 2021).

The textile-fashion industry has the potential to be a driver of sustainable development in Asia, reaching many vulnerable people groups through a large number of SMEs. At the same time, Asia has the potential to mainstream sustainable solutions in the global textile-fashion sector from the beginning to the end of international supply chains.

Five Action Areas for the Asian Textile-Fashion SME Sector

1. Innovation

There is immense pressure and a need for organisations to become more sustainable. This need is particularly strong in the fashion industry, where customers increasingly demand sustainable solutions. In a competitive global industry, innovation is the only way forward to be more sustainable while offering

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competitive prices. However, having the resources to drive innovation is difficult. According to a study by the Asian Development Bank, two-thirds of large firms in the region reported introducing a new product or process innovation, compared to only half in medium-sized firms and only 40% of small firms. SMEs face many barriers when engaging in innovation, the first is a lack of awareness about the environmental problem and the positive social impact of eco-friendly alternatives. Even when environmental problems are addressed, SMEs often lack the necessary information on best practices to solve the issue. Furthermore, SMEs struggle to access skills transfer networks and knowledge hubs or communicate their needs to engage in innovation along the supply chain. Finally, low saving rates and poor public infrastructure deter many SMEs from engaging in innovation (ILO, 2021).

Despite these challenges, SMEs have become increasingly involved in driving innovation. For example, **companies like Sodhani Biotech in India, driven by a young group of people, develop natural dyes as an alternative to environmentally harmful chemicals.** These dyes come from natural sources and are biodegradable. Thus, they can be disposed of without causing pollution. Moreover, they come from natural renewable products or can be produced by upcycling waste (such as onion peels, pomegranate peels, walnut shells, etc.) (crunchbase, n.d., Sodhani Biotech, n.d.).

While enterprises like Sodhani Biotech innovate by combining the richness of our natural environment with new production techniques, other SMEs have engaged in high-end research and development to find solutions to the environmental challenges of the textile-fashion sector. For instance, **enterprises such as Indonesia's Greenhope or Bangladesh's Quantum Polychemics developed eco-friendly alternatives to plastic used directly in textiles or in packaging and shipping.** These enterprises spent many years and large amounts of resources. They came up with ways to allow for more accessible recycling practices of plastic products or create complete alternatives to it with the goal of driving the circular economy. These alternative solutions are then introduced at the beginning of the supply chain, thus creating additional positive impact all the way to the consumer (Greenhope, n.d.; Quantum Polychemics, n.d.).

2. Non-Financial Support

The textile-fashion sector is one of the major employers in the region, especially for women and for people from the rural areas. Therefore, the textile-fashion industry offers high potential to reach these vulnerable groups through capacity-building programmes by engaging the textile-fashion industry. Moreover, high-skilled labour becomes more and more necessary as textile industry production processes change. This certainly includes a constantly growing number of sustainable production practices that are changing at an ever-faster rate. However, this also includes the digitisation of the textile-fashion sector along its global supply chain.

Therefore, governments across the region have adopted non-financial support schemes to enable the workforce to keep up with the changes in the textile-fashion sector and encourage the overall development of the workforce. For instance, the **Government of India (n.d.) has pioneered the Samarth Scheme for Capacity Building in the Textile Sector to provide demand-driven, placement-oriented skilling programmes.** The programme improved the capacity of the workforce and prepares it to work within the sector. Beyond this, the programme also aims to incentivise the textile-fashion sector to create more jobs, especially formal jobs, and collaborate in upgrading the workforce's skills. This is particularly important for the inclusion of the youth in the workforce. The region is home to 600 million youth aged 15 to 24. They are often more vulnerable, face inequalities in the labour market and are generally more likely to be unemployed. For instance, in 2019, youth unemployment in the region stood at almost 14% compared to 3% for adults. The situation is even more severe in Southern Asia, with young people representing half of the unemployed population (Asian Development Bank, 2020; ILO, n.d.)

Other forms of non-financial support include the establishment of platforms for dialogue in order to mainstream solutions to the many challenges the textile-fashion sector faces in the region. **The Sustainable Textile of the Asian Region (STAR) is the first regional network of producer associations aiming to promote sustainable production practices.** Jointly, the members of this platform exchange good and best practices from pioneering factories regarding workplace health, women empowerment and waste management. STAR was initiated by the German Development

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Agency's (GIZ) FABRIC project and now works with producing associations in Bangladesh, Cambodia, China, Myanmar, Pakistan and Vietnam (STAR, n.d.).

The **Asia Garment Hub provides another digital platform that gathers and mainstreams the initiatives that already exist.** Focusing on initiatives regarding decent work and sustainability, the goal of the platform is to connect stakeholders, inform and educate the producers and consumers, and drive action toward more sustainability in the textile and fashion sector (Asia Garment Hub, 2022)

3. Finance

Without financial resources, it is impossible to drive innovation or engage in new sustainable production practices. Their lack of resources is why SMEs often struggle to compete with big firms in terms of research and development, leading to more sustainable production techniques. In fact, financing is crucial from the very first stage of enterprise development: from the idea to the business. Many innovations and solutions for today's problems have not yet come to be realised given that lack of finance. As they often do not have resources saved, SMEs rely on external funding from banks and other financial institutions. However, SMEs are much less likely to receive a bank loan than big firms due to their lack of resources. In fact, the International Finance Cooperation (IFC) estimates that 40% of SMEs in developing countries have an unmet need for financing of 5.2 trillion USD annually. East Asia and the Pacific account for the largest share, namely 46%, of this finance gap (World Bank, n.d.). Having recognised this challenge, many governments across the region have begun to offer financial assistance options to SMEs, such as interest rate subsidies, refinancing, credit guarantees and even mandatory lending quotas. This has helped boost SME lending despite the COVID-19 crisis. Consequently, SME credit markets are growing in countries such as Bangladesh, India and Pakistan (Asian Development Bank, 2021). **In the Philippines, the Central Bank, the Bangko Sentral ng Pilipinas (BSP), leads in establishing various programmes to support SMEs on their way to obtaining finance.** To do so, BSP aims to reduce banks' dependency on collateral during credit evaluation through a Credit Risk Database. Instead, the new approach uses credit scoring models to assess the capacity of SMEs to repay their loans in the future (Diokno, 2021; World Economic Forum, 2022).

In Asia, **new financing tools are emerging fast, including fintech and big tech and increasingly provide an alternative to SMEs to obtain finance.** According to data published by the Cambridge Centre for Alternative Finance, global debt-based alternative finance, or fintech, grew by 26% in 2017, from 287 billion USD to 373 billion USD. Additionally, big tech companies have emerged as investors through fintech. Counting this "big tech credit", total fintech amounted to 543 billion USD globally in 2017. These fintech and big tech options are not administered through banks or other traditional financing institutions but through online platforms. This removes many of the burdens for SMEs to obtain credit, as they rarely have the same requirements as banks regarding collateral. Consequently, 90% of these new alternative financing options went to enterprises across Asia (Cornelli et al., n.d.).

4. Policy

Across many Asian economies, the textile-fashion sector makes up a significant share of the national economy. Similarly, SMEs represent the majority of firms, often employ more than half of the workforce and make up a large part of the GDP. Consequently, policy makers have begun to be more attentive to SMEs, especially textile-fashion SMEs in their countries. This is particularly important, as the textile-fashion industry often emerged under harsh working conditions and negatively impacted the environment. Today, both the condition of workers and the environmental impact of economic activity receive much more attention from consumers worldwide and the international community. Governments have begun to put more emphasise on the role of SMEs to address these challenges. However, most of the current policies focus on improving working conditions, rather than jointly tackling work and environment.

For example, as of January 2022, **the government of Cambodia has raised the monthly minimum wage for workers in the textile, garment and footwear sectors to 194 USD and aims to create 150,000 new jobs.** This is part of Cambodia's larger strategy to reform its economy, moving from a labour-intensive to a skill-based workforce. SMEs are at the centre of this strategy. The government

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has allocated 250 million USD for co-financing schemes through its state-run SME bank (Dempsey, n.d.).

To better tailor its policy support to SMEs, **India established the Ministry of Micro, Small and Medium Enterprises in 2006 to provide the necessary assistance to the SME sector.** Through this Ministry, India implemented the Public Procurement Order, according to which 20% of goods and services procured by Central ministries must be sourced from SMEs, thereby creating additional revenue for the enterprises (SWITCH-Asia, 2019).

In Thailand, the **Office of SMEs Promotion (OSMEP) supports enterprises in driving innovation.** The OSMEP leads networking activities with foreign enterprises to share knowledge and resources. These activities are complemented with capacity building for the workforce. To support these activities with up-to-date information, the OSMEP also established the “SME ASEAN Textile and Clothing Center” (OSMEP, n.d.).

5. Market

The Asian textile-fashion sector is very often regarded in terms of its production capacity. Less attention is given to Asia’s consumption capacity. This is even though the region’s economic development has led to the emergence of a fast-growing middle- and upper-class that is interested in high-end fashion. Consequently, the local fashion industry has gained momentum in some core markets, including Vietnam, the Philippines, Indonesia, Malaysia, Thailand and Singapore. The fashion market of these six countries alone is estimated at 50 billion USD. Moreover, according to the Global Survey of Corporate Social Responsibility and Sustainability, consumers across southeast Asia pay more attention to sustainability when buying fashion products. Hence, 80% of the respondents reported that they were willing to pay more for goods from companies that had invested in lessening their negative social and environmental impacts (Fashion Revolution Singapore & Oxford Development Consultancy, 2021). Growing awareness of the positive effects on health, the environment and the society through a more sustainable textile-fashion industry has enabled local entrepreneurs to lead the change towards a more circular economy. For example, **local entrepreneur Ram Bahadur Gurung founded Trishuli Kapas Udhog as a small enterprise in his town in Nepal to “provide environmentally friendly affordable bedding, quilt and other products even to people with compromised economic conditions”.** The SME collects old textiles and either upcycle them to produce something new or delivers them to the proper waste facilities (SWITCH-Asia, n.d.).

In addition to growing awareness of sustainability, the Asian textile-fashion market is characterised by rapid digitisation. Online payments across the region are estimated to exceed one trillion USD by 2015 due to the ongoing trend away from cash payments towards e-commerce. Already today, eight out of ten consumers in southeast Asia report being digital. This poses a new challenge to textile-fashion SMEs that often face difficulties in accessing digital technologies and can thus not reach their full potential (World Economic Forum, 2022). Fortunately, there are always innovators to lead the way. For example, **the eco-inclusive enterprise moreloop (n.d.) has built a digital platform to connect factories with a surplus of fabrics with customers who can reuse them within the circular economy.** This business model allows reducing environmental damage by reducing the amount of textiles needed in production while at the same time empowering small enterprises in the textile-fashion industry that have a high demand for cheaper but high-quality fabrics (SEED, 2022).

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