

Strategies for sustainable upgrading in global value chains: the Egyptian textile and apparel sector

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The promotion of sustainable value chains is on the rise in the EU, e.g. through the “circular economy” concept, with important implications for the production, consumption and disposal/recycling of textile and apparel (T&A) products. EU T&A supplier countries and firms will increasingly have to adapt to the new EU value chain and market dynamics. In this context, the question arises whether supplier firms in the MENA region will benefit from these new developments, or will be left behind. Based on a case study of the Egyptian T&A sector, this policy note argues that the sector needs to move towards sustainable production in order to benefit from these changes, but that the required transformation of the industry will be highly demanding. EU development policy should increase support in order to promote sustainable value chains in the T&A sector in Egypt, but also in other MENA countries with export-oriented T&A sectors like Tunisia and Morocco.¹

The T&A GVC and recent trends in the EU market

The textile and apparel (T&A) sector can be roughly divided into four stages: (i) raw material supply, including natural (e.g. cotton and wool) and synthetic or man-made fibers (e.g. polyester, nylon and acrylic); (ii) yarn and fabric production and finishing (textile sector); (iii.a) home textile, or (iii.b) apparel production; and (iv) distribution and sales channels at the wholesale and retail level. In contrast to the very labor-intensive apparel sector, textile (yarn and fabric) and home textile production is more capital and scale intensive, which explains why textile production has partly remained in high-income countries or shifted towards middle-income countries, while apparel production has been mostly relocated to least developed countries (LDCs) (Staritz 2012).

T&A represents a classic example of a buyer-driven value chain, which is characterized by decentralized, globally dispersed production networks, coordinated by lead firms which control activities that add “value” to products (e.g., design, branding), but often outsource all or most of the manufacturing process to a global network of suppliers (Gereffi 1994, 1995). Although buyers are not directly involved in production, they yield significant control over manufacturers and demand detailed product and production specifications from their suppliers. The strategies of lead firms/buyers, in particular their global sourcing policies in terms of costs, quality, lead times, flexibility, and compliance, determine production and trade patterns and upgrading opportunities in the T&A sector.

For supplier firms, functional upgrading is of specific importance, and the other upgrading strategies can be viewed as “steps along the way” to achieve functional upgrading. The functional upgrading trajectory² from cut-make-trim (CMT) to original brand manufacturing (OBM) also represents the

main categories of apparel suppliers (Gereffi 1999; Gereffi/Frederick 2010; Staritz 2012).

The European market is served by two distinct T&A GVCs. The first can be thought of as the regional supplier network in which garments production is relocated to geographically close countries, but a substantial share of the textiles and accessories used in production come from EU countries. The exporting countries in this network enjoy secure and predictable preferential access to the European market through free trade agreements (FTAs). The other network is more geographically distant and does not include the use of European fabrics and accessories. While regional suppliers in Eastern Europe and the MENA region, enjoyed substantial market share in the 1980s and 1990s, developments in the industry in the last two decades – including the phasing out of the Multi Fibre Agreement (MFA) in 2005 and the resulting liberalization in trade in apparel – explain the growing shares of Asian producers.

In recent years, a variety of new developments emerged shaping the T&A GVC, EU value chains, and EU market trends with important implications for suppliers in the MENA region. First, increasing production in China and other emerging or low-income countries initially intensified competition. However, the declining dominance of China in apparel manufacturing in recent years has opened a *window of opportunity* for other supplier countries. The increasing role of nearshoring is also an important development, particularly benefiting countries in the MENA region as well as East and Southern European producers. Second, the growing importance of *alternative distribution channels* is a major development on the marketing side, with a growing market share of online retailers and the new trend towards unified commerce strategies.

New consumer trends on the EU market are of key importance for supplier firms/countries seeking to increase exports to the EU. A major trend is the increasing awareness of consumers with regard to the *social and environmental sustainability of production* in the T&A supply chain. The trend offers new business opportunities, but is also a challenge for supplier firms, since consumers and buyers in lower-priced market segments are not necessarily willing to remunerate “sustainability” (CBI 2018a, 2018b, 2018c, 2019a). Niche markets, on the other hand, are characterized by different dynamics, since consumers care more about *product-related “stories”* that represent the *consumer's individuality and style*. In these contexts, stories associated with social and environmental sustainability are major marketing advantages that are also reflected in higher prices. The sustainability trend is interrelated with the *shift towards digitalization*, since stories can be told regardless of the physical distance. Direct-to-consumer (D2C) sales thus gain more and more importance and potentially connect manufacturers and consumers worldwide (ibid.).

In parallel, many multinational and EU companies, governments and organizations shape their purchasing processes and regulations according to environmental and social objectives. This includes also strategies to reduce waste. With the help of new recycling technologies, secondary raw materials are produced from textile waste and reused in the production process. These circular models, however, are not restricted to recycling, but also find their way into sales concepts (e.g. clothing rental, resale and upcycling) (ibid.). The EU, in addition, is also in the process of implementing an action plan to promote the circular economy model in the context of the European Green Deal (EC 2020). Global brands like e.g. IKEA, Adidas or H&M have also announced plans to increase circularity in their businesses until 2030.³

Supplier firms in the MENA region may also tap into a variety of product/sub-sector specific trends. For apparel, even though fast fashion continues to dominate various product/market segments, there is also a growing demand for niche products like Islamic wear or organic products (e.g. organic baby/children's wear) that may be of particular importance for Egyptian suppliers. For home textiles, convenience & comfort continues to be of crucial importance (e.g. low prices, intensive distribution, and possibly fast trend cycles), allowing consumers to spend limited time in deciding and buying home textile products. The wellness trend, which is linked to sustainability and individuality trends, may be an opportunity for Egyptian producers given their direct access to the internationally renowned Egyptian cotton often used in high quality bedding or towel products.

The Egyptian T&A sector: overview and challenges

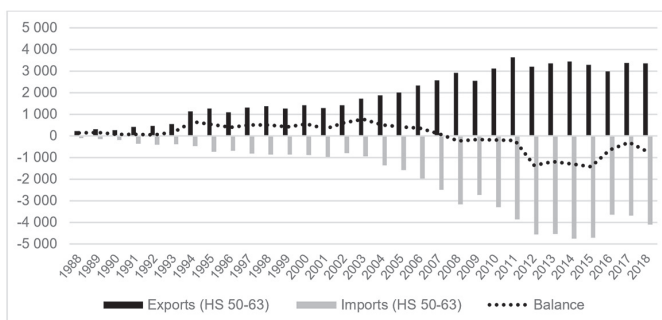
Egypt has a long history in the industry and the roots of its current export-orientation can be traced back to the economic reforms of the 1990s. Following the 1952 revolution and until the 1990s, the Egyptian T&A sector was highly regulated and dominated by public enterprises.⁴ Egypt

produces almost exclusively extra-long staples cotton (ELS, or Barbardense cotton), which is globally known for its high quality. During that period, the government was the sole buyer of Egyptian cotton and the textile sector was geared towards the local market. Imported T&A products were banned.

Economic reforms and privatization during the early 1990s changed the structure of the sector and privately-owned companies regained in importance. After the liberalization of the cotton and textile sector, and the lifting of the import ban on textile & clothing imports, domestic textile companies increasingly shifted towards cheaper imported cotton and textiles, despite the introduction of high tariffs on textile imports. The ban on apparel imports was not lifted until the early 2000s, but high tariffs were introduced to continue to protect the domestic industry. Tariffs on both sectors were gradually reduced to comply with WTO regulations during the 2000s (El-Haddad 2012). Since the 1990s, and in particular during the 2000s, Egypt successfully increased exports of higher-value products, in particular apparel, carpets, home textiles as well as various yarns and textiles. However, the T&A trade balance turned negative in 2008 due to increasing imports of consumer products and inputs (Figure 1).

In recent years, the T&A sector contributed roughly 3% to 4% to Egypt's GDP⁵ and employed more than half a million people within 6,742 enterprises (MOTI 2019).⁶ Most exporting firms are CMT or OEM firms that offer few additional services. In 2018, exports of the T&A sector (excl. raw materials) amounted to almost USD 3 billion, representing roughly 12% of total exports (UN Comtrade 2019). The EU (35% and 64% of total apparel and home textile exports in 2018, respectively) and the US (46% and 22%) are by far the most important export markets. The key export products include men's and women's suits, jackets/blazers, trousers and shorts (35% of total apparel exports), jerseys and pullovers (12%), and T-shirts (12%) for apparel and various linen and terry towels (75% of total home textile exports), curtains (12%), and furnishing articles (9%) for home textiles (ibid.).

Figure 1: Global Egyptian T&A (incl. cotton & wool) trade balance (1988-2018, million USD)



Note: Calculation based on world exports to and world imports from Egypt
Source: UN Comtrade 2019 (WITS)

Notwithstanding the disappointing performance of the sector in terms of growth and exports in recent years (Figure 1), the Egypt T&A industry is in a potentially advantageous position, since Egypt is one of the few countries in the MENA region – besides Turkey – that offers the potential for a fully vertically integrated chain. In addition, Egypt has comparatively low wages (ILO 2014), preferential access to the EU and the US markets, and close proximity to the EU market. At present, these advantages are however not fully exploited. For this reason, the Egyptian T&A sector has been a key sector in the country's industrial development strategies during the last decades (Loewe 2013; ETDS 2015).

The main economic challenges of the industry include (i) the lack of vertical integration due upstream bottlenecks⁷ and high import-dependency for textiles (local ELS cotton is only used for a share of locally manufactured bed sheets, terry towels, and higher-end clothing); (ii) the decreasing production of cotton; (iii) the lack of modernization and often limited workers' capabilities; (iv) the limited capacities and capabilities of many small and medium-sized enterprises (SMEs) to fulfil stringent buyers requirements; (v) the partially negative reputation of Egypt as a supplier country; and (vi) an eroding unique selling point for Egyptian cotton products.⁸

A variety of sustainability challenges also affects the sector along the chain. Cotton production has a large ecological footprint as it depletes the soil, requires agrochemicals, and is highly water-intensive. The stringent demands on water and land consumption required by cotton cultivation pose high and growing opportunity costs to Egypt given the scarcity of both water and arable land, increasing import dependence on the country's major food staple (wheat) as well as a rapidly growing population with its demands on food consumption and land use requirements for settlements and infrastructure. Existing water irrigation systems are old and ineffective, and suffer from underinvestment. Cotton-growing in Egypt, in addition, is predominantly done by smallholders and seasonal workers who suffer from low and instable income due to low margins and low yields, as well as output and price volatility. The International Labor Organization (ILO), reports that child labor, including its worst forms, are prevalent in Egypt's cotton sector. Although up-to-date and robust empirical evidence of the magnitude of child labor is lacking, there is a general consensus on its prevalence, which is why the Egyptian government, supported by the ILO (2019) has elaborated a "National Action Plan for Combating the Worst Forms of Child Labour and Supporting Families 2018-2025".

The processing and manufacturing segments of the T&A chain are also characterized by sustainability challenges. The excessive and unsustainable use of natural resources due to a lack of energy efficiency and the partial lack of wastewater treatment leads to further ecological distortions in an already distressed environmental context. These segments are also characterized by challenging working conditions such as low wages (generally below 200 Euro per month) and limited social services, constrained labor rights (in particular freedom of association), as well as health and safety issues. Given that the great majority of workers in the apparel sector in Egypt are women, they are disproportionately affected by these problems.

Policy recommendations for a sustainable development strategy

This policy note argues that Egypt needs to implement a sustainable sector development strategy, supported by EU donor agencies, in order to take advantage of recent EU value chain dynamics and market trends. We argue that the Egyptian T&A sector needs to focus on moving towards sustainable production and dynamize innovation capacities and capabilities. Supporting the vertical integration and export-competitiveness of the sector are also important pillars of such a strategy.

The *restructuring of the industry towards more sustainable production* needs to be based on (i) a more efficient use of scarce water and land resources, and (ii) the promotion of organic and sustainable cotton production. In order to decrease the environmental impacts of cotton, (home) textile and apparel production, the government – with support from international donors – should aim to (a) modernize the irrigation system in order to decrease water leakage and make water consumption for cotton production more efficient, (b) invest in the development of cotton varieties that use less water, while still delivering acceptable yields, (c) incentivize farmers to shift cotton cultivation to less fertile lands (e.g. via regulatory measures and technical assistance in determining appropriate cultivation areas), and (d) promote global best practices in wet processing activities in (home) textile and apparel production.

The *promotion of organic and sustainable cotton production* throughout the Egyptian value chain will be particularly important to exploit export potentials in the EU market, but is also important to achieve the Sustainable Development Goals (SDGs). Organic cotton production has substantially less demand for water and tends to preserve the soil quality. Given the trend to organic textiles in the EU and other consumer markets, an increase of organic cotton production presents an opportunity for the Egyptian T&A sector. Establishing an organic VC involving farmers, ginning and spinning mills as well as (home) textile and apparel companies that use organic fabrics for end products will thus help Egypt to gain a higher market share in organic (home) textiles and apparel in major consumer markets.

There are also opportunities for *improving sustainability in textile production*, e.g. by improving wastewater management and dyeing practices (using natural dyes, better waste management, etc.). These opportunities would open the possibility of certification under various sustainability standards, such as OEKO-TEX®, Better Cotton Initiative, Organic Content Standards (OCS) and Global Organic Textile Standard (GOTS). Producing home textiles or apparel made from organic cotton can provide added value for producers targeting higher end niche markets.

Government and donor programs could thus consist of a combination of measures supporting (i) farmers in cultivating organic cotton (e.g. through providing technical expertise, supporting certification processes, etc., in cooperation with international donors such as UNIDO), (ii) apparel firms in developing an organic product collection and marketing strat-

egy, and (iii) textile firms in their efforts to increase resource efficiency in production (e.g. with respect to water usage, waste water treatment, utilization of less harmful chemical substances), and to acquire certifications.

In order to enable Egyptian firms to tap into EU market trends, their *innovation capacities and capabilities need to be improved*. A key bottleneck is the challenging access to finance, in particular for SMEs, limiting their investment and upgrading activities. The government could *improve the access to finance* through the promotion of long-term financing instruments at the Micro, Small and Medium Enterprise Development Authority (MSMEDA), and the Export Development Bank via co-operations with international donors like the European Bank for Reconstruction and Development (EBRD).

The *improvement of design capacities of SMEs* is also crucial in order to promote functional upgrading and take advantage of EU market trends, which is why company trainings/internships of design students need to be systematically incorporated into design school curricula and university programs. Cooperation with EU-based design schools should be used to set up student exchanges and for internships of Egyptian students in EU companies. In addition, the Egyptian government should incentivize T&A companies, in particular apparel firms, to set up career development programs for young workers to upgrade their skills in industrial design, textile engineering etc.

T&A firms, potentially supported by the government and donor agencies, also need to focus more on *increasing labor productivity* through incentives and technical and vocational education and training (TVET) programs. Labour productivity growth in the T&A industry is comparatively low, given high degrees of absenteeism, low wages and high labour turnover. In the longer term, this erodes the competitiveness of the industry. Companies thus should provide incentives to workers for skills formation and learning, e.g. by paying wage premiums to workers participating in skills formation programs. The government or donor agencies could also provide technical assistance in setting-up and improving company based TVET programs, e.g. by promoting cooperation in developing a joint TVET program amongst groups of companies.

Supporting the vertical integration of the Egyptian T&A industry is also key in order to benefit from the locational advantage. Promoting vertical integration is particularly beneficial for home textile and – to a lesser extent – apparel firms that use Egyptian cotton as an input. Measures to support vertical integration may include (i) supporting farmers to increase productivity and profitability of cotton production through subsidies, technical assistance, minimum prices, or price stabilization funds, (ii) an export tax on cotton to incentivize local processing, vertical integration, and functional upgrading, (iii) incentivizing and attracting investments in bottlenecks of the T&A value chain (including man-made fiber, cotton yarns, various woven and knitted fabrics that are currently mostly imported by apparel and home textile firms), including in investments in dyeing, printing and finishing services for woven and knitted fabrics.

Finally, *the export competitiveness of the Egyptian T&A sector needs to be strengthened*. In addition to the above mentioned measures that increase the capacities of Egyptian firms on various levels, various additional measures could promote Egyptian T&A exports. The support for the Egyptian cotton brand, for example, could be extended based on a *long-term strategy for Egyptian cotton products to exploit the Egyptian unique selling point*. This also requires continued strict quality controls for Egyptian cotton as the basis for mid- to high-end textile and garment product exports. Supporting the opening of showrooms (similar to Turkey), potentially supported by donor programs, may also benefit such a strategy. Import promotion activities in the EU and other matchmaking activities may also play a crucial role in linking Egyptian supplier firms to the “right” buyers. Currently, many Egyptian firms are integrated in supply chains in which they will struggle to stay competitive in the medium term, as for instance small suppliers are supplying large buyers, while large suppliers are supplying small buyers.

Conclusion

This policy note has highlighted that shifting dynamics in the global and EU value chains and market trends have important implications for regional suppliers in the MENA region like Egypt. In order to take advantage of these changes and stabilize, if not expand their market share in the EU, efforts to move towards sustainable production in the Egyptian T&A sector need to be increased. This needs to be complemented by policies to strengthen the innovation capacities of Egyptian firms. Given existing onshoring trends that will be reinforced in the aftermath of the COVID-19 crisis, which has exposed the vulnerabilities of long-distance VCs, the Egyptian sector would also benefit from increasing its vertical integration and the promotion of functional upgrading. Increasing vertical integration could go hand in hand with the promotion of sustainable production, particularly in the case of organic Egyptian cotton home textile or apparel products. In addition, a variety of measures could be implemented targeting the export competitiveness of the Egyptian T&A industry. Given the formidable challenges involved in moving the Egyptian T&A industry towards sustainable production, EU donor agencies should increase their support to such a strategy.

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- 1 This Policy Note presents an updated analysis that draws inter alia on the results of an ÖFSE research project commissioned by the Centre for the Promotion of Imports from Developing Countries (CBI Netherlands) (see Grumiller et al. 2020a, 2020b).
- 2 An assembly or cut-make-trim (CMT) manufacturer is responsible for sewing apparel and may be responsible for cutting the fabric and providing simple trim (buttons, zippers, etc.). The buyer provides product specifications and the fabric. The apparel factory is paid a processing fee rather than a price for the product. A free on board (FOB) or original equipment manufacturer (OEM) purchases (or produces) the textile inputs and provides all production services, finishing, and packaging for delivery to the retail outlet. The customer provides the design and often specifies textile suppliers. An original design manufacturer (ODM) is involved in the design and product development process, including the approval of samples and the selection, purchase and production of required materials. The last upgrading step in this trajectory is original brand manufacturing (OBM) where suppliers develop their own brands and are thus also in charge of branding and marketing (Gereffi 1999).
- 3 See e.g. <https://www.dezeen.com/2019/09/04/lena-pripp-kovac-ikea-circular-interview/>
- 4 Carpets, which are technically part of the T&A industry, are not discussed in this policy note due to its peculiar dynamics.
- 5 According to the World Bank database, Egypt had an average annual growth rate of 4.2% between 2014 and 2019.
- 6 Employment numbers differ by source due to different calculation methods. The numbers used in this report represent more conservative estimates.
- 7 Based on information provided during interviews, the major upstream bottlenecks are identified in the following areas: (i) man-made fiber; (ii) cotton yarns; (iii) woven fabrics (in particular woven fabrics/denim for non-Egyptian cotton; light-weight cotton fabrics used as input in the local apparel sector; wide-width woven fabrics for home textiles e.g. used for bed linen); (iv) knitted fabrics (man-made fiber knitted fabrics and very fine Egyptian cotton fabrics, e.g. used for fine underwear or polo shirts); (v) quality and supply of dyeing, finishing and printing for woven and knitted fabrics. Most domestic textile production uses imported short and medium staple cotton varieties, which is often imported at relatively high costs due to non-tariff barriers and smaller orders. These bottlenecks contribute to the high import-dependency of the textile sector that particularly emerged after the sector deregulation during the 2000s.
- 8 E.g. due to increasing competition, lack of brand-protection, and the high share of exports of raw Egyptian cotton (which reduces the USP for exports of manufactured products using Egyptian cotton).



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