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THE IMPACT OF ASIAN INVESTMENT ON AFRICA'S TEXTILE INDUSTRIES

Tang Xiaoyang

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About the Author

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Summary

Asian investors' impact on Africa's cotton, textile, and apparel sectors may have profound consequences for the continent's industrialization and development. As southeast African countries seek to industrialize and build indigenous cotton-textile-apparel value chains, the interactions between Asian—particularly Chinese—investors and African companies become more and more complex. Indeed, Asian investors present both a challenge to and an opportunity for local industries, and southeast African countries need a clear vision and tailored policies to make the most of the opportunities.

Key Themes

- Asian companies are the major players in the world's textile market and important customers in the cotton market. Cotton exports from southeast Africa to Asian countries are increasing.
- Southeast Africa has one of the most vibrant textile sectors on the continent, and it is a key cotton-production area.
- Local apparel producers are overwhelmed by Asian imports, but they are able to survive in niche markets.
- The textile sector in southeast Africa acts as a bottleneck, stifling the development of the cotton-textile-apparel value chain in the region. Power shortages, a lack of economies of scale, and the fragmentation of regional markets are the main constraints facing the textile sector.
- Asian investors bring advanced technology and management techniques to southeast Africa that help improve local production processes, though on a small scale.
- There are pilot projects to relocate large-scale apparel production processes from Asia to southeast Africa, but the sustainability of these efforts is unclear.

Takeaways for Southeast African Countries

- African governments can increase the competitiveness of small enterprises by creating production clusters. Yet, these enterprises can be relocated easily, so their contribution to host countries' industrialization efforts may be short-lived.

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- Southeast African governments can attract small- and medium-sized Asian apparel makers to their countries within a short period of time by taking steps to promote investment and offering subsidies.
- To promote long-term development and entice large-scale Asian apparel makers looking to operate in Africa, governments should focus on improving security, diplomatic relationships, the stability of power supplies, labor regulations, and openness toward foreign investment.
- Southeast African countries could avoid the costs of exporting cotton to Asia and importing textiles from Asia if qualified and efficient textile mills were built in the region. But governments and enterprises should be pragmatic about building new mills and coordinate upstream and downstream producers.

Introduction

Advancing from a backward agrarian economy to an industrial powerhouse requires comprehensive strategies. Yet, the development of a cotton-textile-apparel value chain has proved to be remarkably important in the history of industrialization in various regions. The Industrial Revolution in England in the eighteenth century started with the boom of textile manufacturing before spreading to other sectors. Later, in the East Asian miracle, the textile sector once again played a vital role. As depicted in the “flying geese” pattern, different countries over the years—from Japan to the East Asian Tigers, to China and the Association of Southeast Asian Nations (ASEAN) countries—have tried to catch up with advanced economies by first taking over labor-intensive sectors, such as textile and apparel manufacturing, and then climbing up the value chain to more sophisticated industries.¹

During recent years, African countries have been actively promoting industrialization. Development of value-added manufacturing is essential to transform agrarian societies and in turn to solve the continent’s persistent poverty problem. Under the “flying geese” model, economists expect that textile manufacturing may greatly contribute to Africa’s industrialization process. Asian companies’ roles in this process are particularly intriguing, since they are currently the major players in the world’s textile market and an important customer in the cotton market. Their interaction with enterprises in Africa’s cotton and textile sectors may have profound consequences for the continent’s industrialization and development.

To help understand the Asian impact on the development of Africa’s cotton-textile-apparel value chain and on Africa’s industrialization in general, southeast Africa is used as a microcosm. The region has one of the most vibrant textile sectors on the continent, and it is an important cotton production area. The value chain from cotton farming to textile processing and to apparel making plays a significant role in the economic life of the countries in this region, notably Botswana, Lesotho, Malawi, Mozambique, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. The development of the cotton-textile-apparel value chain in this region can comprehensively and significantly shape the socioeconomic life in its rural and urban areas.

During the past decade, the cotton value chain in this region has been substantially influenced by Asian countries. The impact can be seen in four areas: international competition, import, raw material sourcing, and investment.

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International Competition

Regarding competition in the global textile industry, southeast African countries used to have booming textile and apparel sectors. The size of the apparel industries targeting the U.S. export market increased rapidly in particular after the United States adopted the African Growth and Opportunity Act (AGOA) in 2000. Yet, the apparel export business suffered a serious setback when the Multi-Fiber Arrangement, an international trade agreement, expired in 2005.² Because textile products from Asian countries are no longer limited by the quota system in the export destination markets, their low price allowed them to quickly grab a large portion of Africa's export market in the United States and Europe. Consequently, textile and apparel exports from southeast Africa to the U.S. market have decreased significantly, and a large number of factories have closed down (see table 1).

Table 1. Textile and Apparel Exports of Southeast African Countries to the United States, 2004 and 2008

Country	2004	2008	Change %
Botswana	20,234,911	15,805,297	-21.89
Lesotho	456,000,000	339,690,343	-25.51
Malawi	26,774,960	12,681,765	-52.64
Mozambique	2,322,383	500	-99.98
South Africa	164,000,000	40,893,687	-75.06
Swaziland	179,000,000	124,901,316	-30.22
Tanzania	3,320,478	1,870,695	-43.66
Zambia	51,401	35,660	-30.62
Zimbabwe	4,359,378	234,030	-94.63

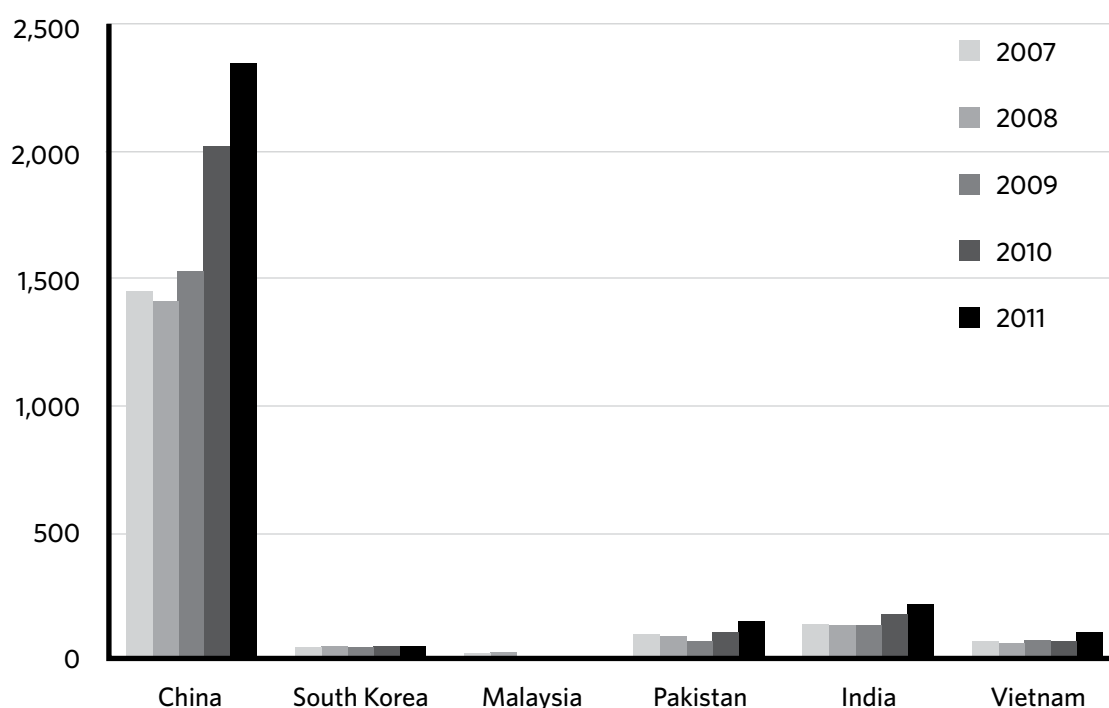
Source: U.S. Department of Commerce, Office of Textiles and Apparel

Import

To add insult to injury, textile products from Asian countries even flooded into Africa's domestic market, further threatening the existence of the remaining textile industries in that region. Trade unions in South Africa,

Zimbabwe, Mozambique, Lesotho, Swaziland, and Zambia reacted to the influx by issuing a joint statement in 2005 asserting that the textile and apparel industries and their workers faced a fundamental challenge from the Chinese imports. Furthermore, they warned, the continent risked “falling into a colonial style relationship with China.”³ China poses by far the largest threat to southeast Africa’s textile and apparel industries; its textile exports to southeast Africa exceeded \$2.3 billion in 2011. That is an increase of 62 percent over its \$1.4 billion in exports in 2007. (China is not the only Asian exporter of textiles and apparel to southeast Africa, though the next largest, India and Pakistan, are far behind, at \$211 million and \$150 million, respectively, in 2011 [see figure 1].)

Figure 1. Asian Textile and Apparel Exports to Southeast African Countries, 2007-2011 (in million U.S. dollars)



Source: UN Comtrade database

Raw Material Sourcing

Asian companies are also becoming more of a presence in Africa further up the cotton-textile value chain, in cotton acquisition and production. An increasing number of Asian buyers are arriving in the region to engage directly in the plantation, purchase, and processing of cotton. Further research is required to understand whether the structure of the cotton sector in southeast Africa

has undergone substantial changes, in terms of both quantity and quality, as a result of the increased involvement of Asian companies. If it has, then how the transformation is happening and what kind of implications it may have should be examined.

Investment

Besides trade, investment from Asian countries is shaping the development of the whole cotton-textile-apparel value chain in southeast Africa. Most of the textile manufacturers in this region are in fact of Asian origin. Until 2005, they were attracted to invest and produce in these countries by dint of their preferential trade terms with the United States and Europe, such as through AGOA and Everything but Arms.⁴ The expiration of the Multi-Fiber Arrangement quota system largely reduced African countries' trade advantage, and the Asian investors retreated.⁵

However, as production costs in China have been rapidly increasing in recent years, some economists believe that the time is coming for Africa to take over apparel manufacturing from China. Chandra, Lin, and Wang suggested that Chinese investors will shift apparel-making and other labor-intensive manufacturing sectors to Africa and thus fuel African industrialization.⁶ Is this vision realistic? Will southeast African countries regain the Asian investments in the apparel and textile sectors?

Several researchers have taken note of the growing importance of Asian players in Africa's cotton-textile-apparel value chain in recent years and have analyzed aspects of the impacts of these investments. Curran and Taylor, for example, focused on the movement of Asian investors before and after the Multi-Fiber Arrangement ended.⁷ Brooks and Lee studied labor relations in Chinese textile mills in Zambia and Tanzania, respectively.⁸ However, no one has undertaken a study with the aim of establishing a systematic understanding of the impact of Asian investment in different sectors of the southeast African economy to try to analyze how such engagement will influence overall development of the region's cotton-textile-apparel value chain and whether it will contribute to the economic growth of the region over the long term.

Any effort to do that must begin at the sector level. Asian players are involved all along the value chain in southeast Africa, to greater or lesser degrees in each country. Local regulations and traditions enter into the equation. The findings of a forty-five-day field research trip to the region⁹ are broken down by sector, starting with cotton and then textiles, and finally the finished product, apparel. Within each sector, the impact of Asian engagement on four distinct areas—the market, government and policy, technology and productivity, and society and the environment—is reviewed.

Cotton Sector

Market

Because cotton production in South Africa is relatively small (see table 2) and Botswana has very few cotton plantations, analysis of the cotton sector is mainly limited to Zambia and Tanzania. Both countries liberalized their cotton sector in the mid-1990s, and the market is open for both domestic and foreign investors. Multinational companies have shown strong interest in entering the local market to purchase and export cotton. The earliest foreign investors in this region are multinationals from the United States, Europe, or neighboring African countries, among them Cargill (U.S.) and Dunavant (U.S.) in Zambia and Alliance (Kenya) and Biosustain (Germany) in Tanzania (see appendix 1 and appendix 2).

Table 2. Cotton Production by Year, 2005–2013 (per 1,000 480-pound bales)

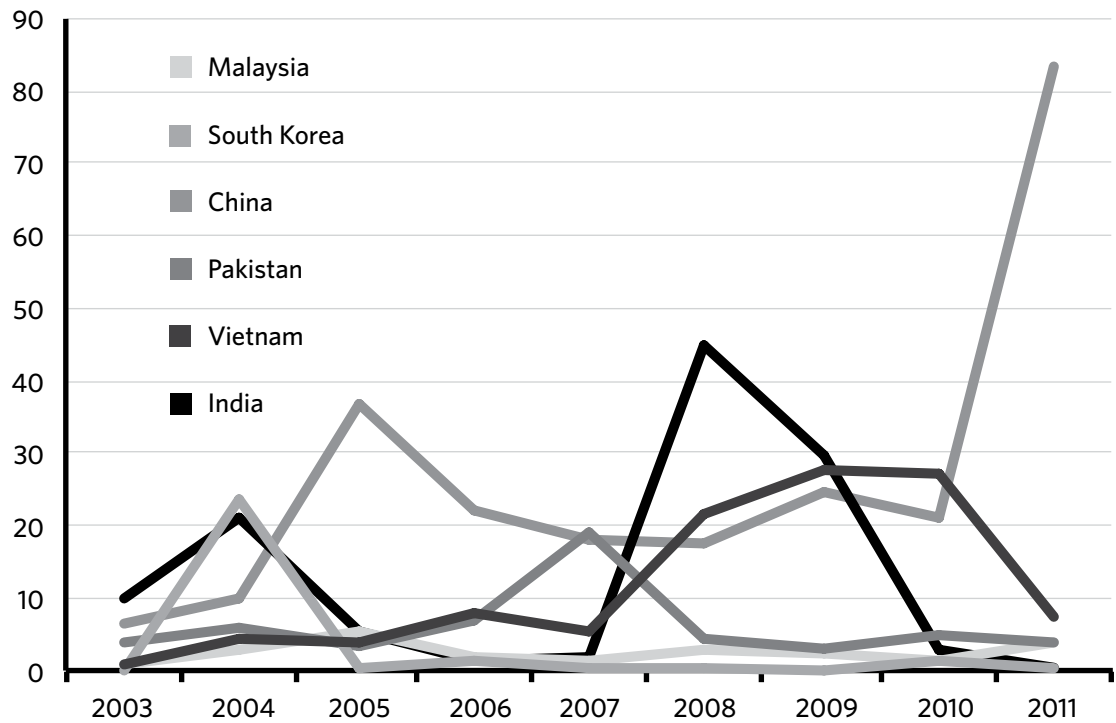
	2005	2006	2007	2008	2009	2010	2011	2012	2013
Malawi	90	109	130	100	60	100	170	160	180
Mozambique	165	165	115	135	110	87	170	160	125
South Africa	68	52	46	38	39	81	59	29	30
Tanzania	575	200	310	570	410	275	315	500	400
Zambia	400	160	160	200	150	200	475	230	275
Zimbabwe	490	475	565	415	500	500	600	500	500

Source: U.S. Department of Agriculture

Asian investors entered the arena in the mid-2000s. Chinese-owned Chipata Cotton Company (CCC) started to acquire cotton in the Chipata region of Zambia and quickly expanded to Zimbabwe, Malawi, and Mozambique (see case study 1). Several other Chinese companies have since arrived in Zambia, Tanzania, and Zimbabwe. Indian companies are active as well. The Parrogate Group started in Zimbabwe and expanded to Zambia and Malawi. Seeing their success, a number of ginners—people who operate cotton gins—arrived in the region from India around 2011 and 2012. Olam International, a Singapore-based global supply chain manager and processor of agricultural products, has developed an extensive presence in Zambia, Tanzania, and Zimbabwe.

The arrival of Asian buyers in the region is mainly driven by the rising demand of the Asian textile industry. China has become the world's largest cotton consumer, and because the domestic cotton price in recent years has been much higher than the price in the international market, cotton export to China has become highly profitable. The booming textile industries in Southeast Asia and South Asia also need a huge amount of cotton, though the amount of cotton going there is smaller and fluctuates greatly, while China has been steadily increasing its sourcing from Africa (see figure 2).

Figure 2. Export of Cotton From Southeast Africa to Selected Asian Countries, 2003-2011 (in millions of U.S. dollars)



Source: UN Comtrade database

The Asian newcomers have had a significant impact on competition in the local cotton market. As an example, cotton buyers in Zambia previously did not pay cash to farmers, but wrote receipts and would pay what they owed the following year. When Chipata Cotton Company entered the market, however, it paid farmers in cash, an obvious incentive to farmers to sell to the CCC. As the competition is getting fiercer, ginners are rushing to offer the most attractive price and manner of payment, as well as providing better technical

assistance and inputs. Cargill and Dunavant began to distribute cottonseed earlier to reach more farmers. The CCC built a new seed processing plant to produce seeds of high quality. This competition among buyers largely benefits the farmers and pushes the cotton sector forward.

The market situation in Tanzania looks different. Most international cotton companies in southern Africa stay away because of the unique, centralized structure of Tanzania's cotton sector. Ginners there are permitted to contract with growers, but, unlike in other countries, they are not permitted to provide their own seeds, inputs (pesticide, herbicide, fertilizer, and so on), and technical assistance directly to the Tanzanian farmers. Instead, they have to contribute a sum of funds to the Tanzania Development Trust, which in turn procures inputs, distributes seeds, and provides technical assistance to the farmers. Under this system, the ginners bear half of the input costs and the farmers bear the other half, but the farmers' portion is collected by the ginners. The Tanzanian cotton authority argues that with the scale of this centralized system, chemical materials can be procured in bulk, thus reducing the cost.¹⁰ Yet, in practice, the ginners find that they cannot get the cotton as contracted. In part, this is because the technical input and assistance are not provided efficiently. Quality control and grading have become loose since the old regulation and monitoring system collapsed after liberalization. Farmers add water to cotton. Various grades are mixed. Some ginners have grabbed the farmers' contribution for their own pockets. The farmers, meanwhile, complain about low prices and breach of contract by ginners. All of this leads to further mistrust between ginners and farmers.¹¹ In this context, most international companies hesitate to enter the market. Not counting investors from neighboring countries, only one multinational company, Olam, was active in the Tanzania cotton market. But even Olam is said to have downsized its activities since 2012 due to the difficult market conditions.¹² As a result, most of the 42 ginneries in Tanzania are small and medium-sized local companies, many based on former cooperatives.

Nevertheless, Dahong Textile decided in April 2013 to invest in Tanzania's Shinyanga Province by setting up a ginnery and a spinning mill. Tanzania's low cotton price and cheap labor cost were particularly attractive to the Chinese textile company. It has plans to demonstrate and disseminate advanced cotton plantation skills to Tanzanian farmers to improve the quality and production of cotton.¹³

The Japanese firm Nitori took a different approach to investing in Tanzania. In May 2013, the company's managing director asked President Jakaya Kikwete, who was visiting Japan, to allocate 20,000 hectares where Nitori could grow cotton. Kikwete was amenable to the request. Nitori also announced a plan to invest \$100 million in Tanzania to set up a "fully-fledged textile industry"¹⁴ that will create thousands of jobs and improve the country's exports.

Concurrent with the arrival of new Asian and foreign investors in south-east Africa, the structure of market competition has been constantly changing. Some old players quit certain countries; Great Lakes, for example, withdrew from Zambia. Some players merged or purchased other ginneries to increase their presence: Olam and Continental built a business partnership in Zambia, and China-Africa Cotton bought a ginnery from Cargill in Malawi. But several small newcomers suffered huge losses. The Chinese company AST was said to have lost more than \$3 million in Zambia in 2012. The reason is that ginneries' profitability is closely related to the scale of business. Only when a company acquires enough cotton can it recover its pre-investment in seeds, inputs, and technical assistance. As the competition grows fiercer, large ginneries try to increase their investment, focus on certain countries, or seek alliances to expand their market share. As a result, small ginneries may encounter even more difficulty maintaining a profitable operation in the future.

In other ways, the rapidly inflowing Asian investment has brought new challenges for the development of local markets. One common problem among different countries is what is known as side buying, in which new companies buy cotton from farmers who have already contracted with other companies. The contracting ginneries provide seeds, inputs, and technical assistance throughout the year. The new companies do not have such costs and therefore can usually offer a higher buying price. This would obviously strongly disturb the market if it were not regulated, as no company would be willing to offer any more seeds, inputs, and technical assistance. In Zambia, nine of eleven ginning companies formed an association to regulate side buying (two insignificantly small companies refused to join). Old market leaders such as Cargill and Dunavant work with dynamic new players like CCC and Continental to maintain a healthy market order. Any company found to engage in side buying will be punished by the other association members. Similar organizations have been formed in Malawi and Zimbabwe. Though this kind of cooperation cannot completely prevent side buying, it has kept the market functioning and progressing.¹⁵

Still, the agreement among the ginneries has brought forth complaints from farmers. In Zambia, the ginner association fixed the cotton purchase price in 2011 and 2012 to avoid side buying. In 2012, the fixed price was particularly low—only half of the 2011 price—as a result of the international market price. Some Zambia farmers were so angry that they preferred to destroy their cotton rather than sell it to the ginneries. The farmers' association went to court, alleging that the fixed cotton price amounted to a price monopoly. In 2013, the ginneries agreed not to fix the price anymore, though members of the association reached a tacit agreement and the prices for all companies wound up being within a small range. The farmers' association is not satisfied with this situation and plans to continue the fight. It wants to establish direct connections with Asian textile mills and cut out the multinational merchants in Zambia.

(This kind of Asian impact will be discussed in the section about technology and productivity below.)

Finally, another impact of Asian businesses on cotton-producing countries in Africa comes from afar. Because the Chinese government wants to encourage domestic cotton plantations and protect Chinese farmers' interests, it has imposed a quota for cotton imports. Even state-owned Chinese ginners like China-Africa Cotton (CAC) cannot evade it. Thus a major problem for China-Africa Cotton is how to bring cotton into the vast Chinese market. One method is to import cotton lint to a mill set up in the Qingdao Free Trade Zone, where it can be processed into yarn because the quota does not restrict yarn imports. However, the mill in Qingdao is able to process only 30 percent of CAC's imports. To process more cotton, CAC's management decided to invest in a spinning mill in Mozambique, which will start operation as early as 2014.¹⁶ Dahong's investment to build a spinning mill in Tanzania has a similar rationale. This can be a precious chance for southeast Africa to develop spinning capacity.

Case Study 1: China-Africa Cotton

China-Africa Cotton was established in 2008, but CAC's history can be traced to 2003. A manager of the former Chinese aid project Mulungushi Textiles in Zambia, Ju Wenbin, from Qingdao city, sensed an opportunity in the burgeoning cotton market. He partnered with several investors to set up the Chipata Cotton Company. CCC was growing at a modest pace in Zambia until 2010, when a new shareholder, China-Africa Development Fund (CADF), an equity investment fund of the state-owned China Development Bank, brought in capital. The amount of cotton purchased jumped from 3,000 tons per year on average before 2009 to over 10,000 tons in 2010 and has become a heavyweight in Zambia, Malawi, and Mozambique. In 2013, through acquisitions, CAC entered the Zimbabwe and Mali cotton markets.

CAC is now a joint venture of CADF, Qingdao Ruichang Cotton Industrial, and Qingdao Huifu Textile. CADF owns 65 percent of the total shares but does not participate in daily operations. The other two are private companies, of which Ju is a shareholder. CAC had invested more than \$60 million as of 2013. It has set up six gineries and two cottonseed oil extraction plants in five countries. On average it purchases more than 100,000 tons of cotton, employs 3,300 local workers, and works with over 200,000 local growers.¹⁷

Ju said that CADF's investment not only brings in huge amounts of capital, but also helps the company get short-term loans from China Development Bank. In the fierce scramble for cotton, the availability of capital plays a decisive role in winning contracts with farmers. Chinese banks' deep pockets thus give Chinese companies a big advantage. Yet, as noted earlier, CAC is constrained by the cotton import quota in China. Worse, it has to export all its cotton to China, for this is the condition of lending by China Development Bank. To solve this dilemma of growth, CAC plans to build a spinning mill in the Mozambique port city of Beira in 2014.

Due to CAC's success in Zambia, the Malawi government invited CAC to enter Malawi after the country established diplomatic ties with the People's Republic of China in 2008. In the investment agreement, the Malawi government hoped that in addition to cotton exports, CAC could provide training for local technicians and could also set up cottonseed oil extraction plants and textile mills. When the Chinese government decided to set up an agri-tech demonstration center, CAC became the ideal candidate and was assigned the task in October 2011. Through that project, CAC will not only be able to offer more training to local farmers and technicians, but also to set up a seed company to reduce Malawi's dependence on imported seed. In both 2011 and 2012, CAC was the market leader in Malawi in terms of the amount of cotton purchased. In short, it has achieved both political and economic success in the region.

However, this opportunity may be fleeting. The cotton quota has not achieved its expected goals, and it is much criticized within China for distorting the market and causing unfair competition among cotton importers. It is likely that the Chinese government will abandon the practice of maintaining a high cotton purchase price and instead adopt a subsidy for farmers and liberalize the cotton market. The cotton price in China would then be equal to that in the international market, and there would be no quota. When that day comes, will spinning mills in Africa be able to compete with those in China? Will Chinese and Asian companies still be willing to invest in cotton processing mills in Africa? These questions require serious consideration and careful preparation today.

Government and Policy

Asian engagements are conditioned by African countries' policy framework; at the same time, the Asian engagements influence the governments' decisions. In almost every cotton-growing country, the government emphasizes value addition and processing of cotton; the governments do not want to be perceived as a mere provider of natural resources for Asia. Yet few of them have a functioning textile sector to process their cotton domestically. Almost all spinning mills in Zambia and Malawi have closed down. Zimbabwe's once flourishing textile sector collapsed because of sanctions imposed by the West over unhappiness with President Robert Mugabe. Mozambique has no substantial processing capacity either so far.

That leaves Tanzania as the only cotton-growing country that has a significant textile sector. Yet, Tanzania's textile producers have been facing a cotton shortage since 2010. Especially during 2010–2011, several mills had to stop production because they could not get cotton. Now, the mills still have to buy a whole year's stock in advance to avoid supply interruption. Actually, the domestic textile mills all together can handle only about one-third of the entire cotton production in Tanzania. The problem is that the ginners prefer to sell to foreign buyers rather than to domestic mills. That's because the ginners in Tanzania are small, and they need buyers' early orders as a guarantee to borrow money from the banks. Foreign buyers, often from Asia, with deep pockets and immense demand are able to place orders to lock in the sales of cotton, while many small and medium-sized local mills do not have enough cash to purchase a whole year's stock. The lack of financial tools, such as a letter of credit or a futures contract, forces local mills to borrow large sums to buy cotton.

The Tanzania Cotton Board, a government body established to regulate and promote the cotton sector, understands the problem, but it is not willing to interfere. The cotton board has two functions: to assist farmers with producing and selling cotton and to assist buyers with buying cotton from the market. The market determines the sales direction and, according to the director of the

cotton board, the government cannot regulate the sales direction, even when it hopes to get more added value on cotton.¹⁸

This attitude regarding the cotton sector is common among authorities in the region. An official in Zambia's Ministry of Agriculture said that cotton is mainly in the hands of the private sector. The companies have their own extension outreach services, and the ministry does not intend to get involved. The government solely stipulates guiding policies and coordinates investment. Nonetheless, the Ministry of Agriculture is considering including the cotton sector in its subsidy program, as it is an important cash crop and affects hundreds of thousands of farmers. The ministry is also supporting local farmers in setting up their own ginning company, the MFGP (Mumbwa Farmer Ginning and Processing Association), to break the price monopoly of foreign ginners. The ministry has agreed to distribute cottonseed to the self-organized farmers so that they do not have to sign contracts with the multinational ginners.¹⁹

Technology and Productivity

Asian ginners have brought their own approaches of production and management. First, in Zambia, Zimbabwe, Malawi, and other countries with decentralized systems, each ginner develops its own cottonseed, and different technologies are introduced to the region. For example, in 2013 CAC built an acid seed treatment plant intended to significantly raise the germination rate of cotton. Likewise, inputs and technical assistance provided by various Asian buyers contribute to the sector's technology advance.

Most of the Asian companies involved in the southeast Africa cotton industry are much smaller than the multinationals like Dunavant and Cargill. This may be both a disadvantage and an advantage regarding productivity. As the CEO of Continental Cotton Zambia put it, "Asian companies only make small margins whereas global companies have big margins." This may be true when we talk about the global operation as a whole, as global companies have established sales and logistics networks. They can even get a higher cotton import quota in China than CAC thanks to their political connections.²⁰ Yet, within the region, some Asian companies seem to perform better than the big multinationals. For example, CAC not only rapidly grabbed market share, but it also bought a ginnery from Cargill in Malawi. CAC's general manager, Shi Jinran, said that CAC can make a greater profit than the global companies in the region by improving cost control and management. Global companies have a large number of staff members and a complicated bureaucracy. In comparison, CAC is small and flexible, and it can strictly control cost efficiency based on local situations. It avoids unnecessary spending, calculates the risk of contract breach, ensures extension outreach, and prevents theft and corruption. As a result, its costs are reduced to a much lower level than those of the multinationals.²¹

Besides corporate engagements, Africans are actively gaining cotton production experience from Asia through various channels. Officials, professionals,

and ordinary farmers frequently visit Asian countries and some have even studied there for an extended period. Most visits are pretty short, usually just one to two weeks, but the impact can be big and long lasting. For instance, members of the Zambian Cotton Farmers Association were sponsored by the European Union to visit cotton-producing Asian countries like China, India, and Turkey, and textile producing countries like Vietnam and Bangladesh during 2006–2011. Eighteen farmers in total participated in the trips. In interviews with six of them, the common refrain was that the trips “opened my eyes.” For the first time, these farmers were exposed to the whole value chain of the international market. They now understand how the cotton they grow is then processed to become fabric and then is used to make apparel. They also saw the flow of cotton across countries beyond Africa and were surprised to see the huge price gap for cotton between African source countries and Asian destination countries.

Learning from a cooperative model in India, these farmers decided to start their own cooperative organization after they returned. With support from the Zambia Ministry of Agriculture and Ministry of Trade and Industry, they set up the MFGP to challenge foreign companies’ monopoly. The farmers apply their knowledge of quality control and contamination prevention to the farming and buying practice. An Indian ginnery, Grafax, agreed to gin cotton for the MFGP for a fee. Farmers are now trying to import cheap inputs from Asia to reduce costs. They saw, for instance, that the same pesticide that Dunavant offers to sell them for \$3 can be had for 30 cents in China. The MFGP further contacted textile mills in Thailand and Vietnam to inquire about selling them cotton. It is not difficult to sell cotton, the MFGP found; the challenge is to supply consistent quantities. The farmers’ self-organized cotton purchase so far has operated on only a very modest scale, merely 90 tons of cottonseed in total. They are thinking of uniting with farmers in neighboring countries to increase the supply.

In addition, the farmers want to build a research center and establish linkages with Turkey, where the cotton yields are 5,000–6,000 kilograms per hectare (kg/ha), four to five times Zambia’s average yield of 1,200 kg/ha. From the Asia trip, the farmers also learned that cotton can be profitable in many uses beyond apparel, including lint, seed, oil, cake, and extracts, and that farmers should not only earn income from selling what they harvest, but should also learn how to earn additional income by making full use of cotton products and not going through middlemen. In short, they came to feel that contract farmers in Zambia today are treated like laborers by the Asian buyers, a relationship built on little to no trust. A better relationship with the Asian buyers ought to be developed through the incorporation of the MFGP.²²

Yet, several ginneries don’t think that the farmers’ efforts to self-organize can grow into a serious business. For them, all this talk is actually a tactic to break the price agreement between the farmers and current ginneries and to raise the cotton purchase price.

Society and Environment

With their rapid development in Africa, Asian companies have also made an impact on local communities and environments in several ways. For example, the recycling practice in certain Asian ginneries has demonstrated to African people how to make full use of cotton products. After cotton is transformed into lint and oil is extracted from cottonseed, the CAC makes the rest of the seeds into cakes for animal feed or uses it as fuel for boilers. Additionally, the grease-like substance from the extraction process can be used in soaps. Through such complete recycling, there is almost no waste from cotton processing.

Another impact of the Asian operations is opening up work alternatives and relative independence to women. Typically, the workers employed by ginneries are mainly male, as the plants need heavy labor and the field staff need to travel a lot. In Zambia, land belongs to men; even when women grow cotton and make money, they need to pay the men because of land ownership. However, in some households, women may not contract with the same company as their father or husband.²³ Having an increased number of ginners provides them with more options beyond the ginneries that employ the men in the family.

The independence for women comes in the form of developing handloom skills and establishing a handloom cluster. This stems from the visit of members of the Zambia Cotton Farmers Association to India, where they saw women doing handloom weaving. Upon their return, they decided to send fifteen Zambian women to Ethiopia to learn how to do it. The Ministry of Trade and Industry also contacted India to support Zambian women in setting up a handloom cluster. They will produce cotton-based items such as tablecloths, hand towels, and scarves that require intensive labor but little capital.

Finally, communications between Asian investors, especially Chinese investors, and local communities in Zambia are improving. The outside investors used to have serious difficulties communicating with the local community. For example, the CAC previously did not attend the meetings of the ginners' association. But since 2010, the new general manager, Shi Jinran, realized the importance of such meetings. He said that the company can not only share information with others in such communication, but also avoid being isolated and marginalized in the market. The management also actively promotes local employees to management positions. Shi believes that if local employees see an opportunity for promotion, they will be more loyal to the company and be more motivated to do good work. Besides, local people know how to manage local workers, and strict management coming from them won't arouse nationalistic resentment the way it would if it were imposed by foreigners. Two local managers have been awarded trips to China. The CAC is planning to have at least one local employee serve as vice general manager or even general manager in each country's subsidiary.²⁴

Apparel-Making Sector

Market

Southeast Africa still has a significant apparel-making sector, though it is much smaller now than it was ten years ago. South Africa, Botswana, Lesotho, and Swaziland, which are relatively advanced in industrial development as opposed to the cotton-producing countries, are the main apparel manufacturing countries. The decline of their apparel sector is mostly caused by competition with Asian products in the international market and the influx of Asian imports into their domestic markets. China used to limit the amount of textiles it exported to South Africa in 2006 to protect local manufacturers from being completely overwhelmed by Chinese imports, but this policy stopped in 2009 because of ineffectiveness. During the period that Chinese imports were limited, other Asian investors continued to enter the South African market and grab shares from local manufacturers.²⁵

Through it all, local apparel factories have managed to survive in every country. Most of them specialize in segments that require fast response and small quantity, such as fast fashion, uniforms, and work wear. Even in those countries with little apparel industry remaining, like Zambia, several local companies are still producing work wear for mining companies or uniforms for schools. Exports for international markets, especially those under AGOA, have been decreasing in general.

South Africa is the region's biggest apparel market with 1,000–2,000 apparel manufacturers according to different estimates. Today, retailers play a key role in its clothing industries. The retail chains decide where to buy their goods according to profit and cost calculations. A main reason for keeping a large apparel industry in South Africa is the fast fashion business model newly adopted by the major retailers. The business model, which was developed by the Spanish clothing and accessories retailer Zara, requires fast feedback and reaction within one week. That largely rules out Asia, because the lead time is too long: clothes from Asia usually take six to eight weeks to arrive in South Africa. The quality of the Asian goods is also an issue, and returns become complicated. Rand fluctuation and terms of money transfer add to the problem of imports. While the rand was strong from 2005 to 2010, retailers tended to buy from overseas because the imported goods were cheaper. Since the rand has been depreciating during the past few years, retailers are turning back to domestic manufacturers sourcing a part of their supplies locally even if the price is still higher than Asian imports. Major retailer chains such as Woolworths, Mr Price, Edgars, Truworths, and Foschini make up 80 percent of apparel sales in South Africa. They also radiate to neighboring countries and control the middle and high-end markets there.

In South Africa, local companies, mainly owned by white and Indian immigrants, make up the majority of the textile industry. A number of foreign investors have come from mainland China and Taiwan. Numerous small and medium-sized Chinese investors set up CMT (cutting-making-trimming) or CMP (cutting-making-packing) factories, as they require very little capital. One CMT production line cost only 200,000 rand (\$20,000) in South Africa in 2012. The Chinese investors concentrate in an area around Newcastle City in KwaZulu-Natal Province (see case study 2). Lesotho and Swaziland have apparel-making clusters that consist of predominantly foreign investors. Botswana also has several small apparel industrial areas in Gaborone and Francistown, which host a few investors from China, India, and Mauritius.

CMT and CMP manufacturers frequently change their locations, as moving costs are low. They go after government subsidies, orders, and favorable investment conditions. For example, one CMP company moved to El Salvador, Thailand, Swaziland, Botswana, and Laos within just twenty years. South Africa and Botswana used to offer generous subsidies and tax holidays and attracted many investors from Hong Kong, Taiwan, and mainland China. When the preferential policy stopped and the wage and land costs rose, many of these investors moved. Some went to Southeast Asia, others to neighboring African countries with lower wages and better incentives, like Lesotho and Swaziland. Even within South Africa and Botswana, companies are moving to the regions offering better facilities, more chances to get orders, and other favorable conditions.

When they move, investors from Greater China (the mainland, Hong Kong, and Taiwan) tend to form clusters, because they spread information among relatives and friends, can help each other in an unfamiliar location, and companies in the cluster may be able to get orders more easily. In the well-established apparel sectors in southeast Africa, Asian investors can also find machinery sales agents and expatriate technicians of Asian origin. Most of the fabrics and almost all the accessories have to be imported from Asia, for the region has only a few textile mills left. In 2009, two Chinese textile companies planned to set up textile industrial zones in South Africa and Botswana, respectively. These zones are supposed to host fabric makers and apparel manufacturers together to build up a complete value chain in the clusters. Yet, both projects are stalled, partly because the host governments did not provide sufficient land and incentives and partly because the developers encountered operational difficulties in China.

Most of the Asian CMT and CMP factories operate on very low margins. As the Chinese manager of a CMT said, apparel-making is simple. Chinese companies are just a little bit more diligent than others, and they correct management loopholes, speed up production, and guarantee the delivery period so they won't be penalized by customers. That's why Chinese companies can survive in this sector. Local companies and even some investors from Hong Kong

and Taiwan have left in pursuit of higher profit margins. It is only the investors from mainland China who are willing to go to so much trouble for such a thin profit.²⁶ According to the chair of the Newcastle Chinese Chamber of Commerce and Industry, Alex Liu, if a piece of clothing costs 100 rand in the retailer's shop, the supplier's agents probably will ask for 50 rand. The agents usually want a 20 percent margin, which means that the costs of production should be controlled to ensure that they remain below 40 rand. Of the 40 rand, 25 are spent on fabrics and 15 are given to the CMT factories. Out of their share, the CMT factories are responsible for the workers' wages, as well as electricity, water, thread, and other overhead costs. Thus, the CMT segment is not attractive for those who have an opportunity to run a supplier agent or retail business. Yet very few Chinese companies are able to become agents in southern Africa, for agents need to provide excellent service and be good at design

and culture. Lacking communication skills and experience in service, Chinese companies often have to remain at the bottom of the apparel manufacturing value chain.

Exports to U.S. or European markets usually are more lucrative. However, few apparel factories are interested in those markets. The main reason is that U.S. buyers have very stringent requirements on quality, delivery time, and certification. Some manufacturers are not capable of fulfilling all these requirements; others tried and suffered huge losses. Deficient facilities, unskilled workers, a weak industrial

base, a cumbersome export process, and other factors in Africa are daunting hurdles for apparel makers to break into the international market.

While some Asian investors are leaving traditional apparel production bases like Swaziland, South Africa, and Lesotho, others are experimenting with new production locations in the region. The most remarkable example is that a gigantic apparel-making corporation from China, JD Group, invested in Tanzania in 2011. The group has more than 28,000 employees in Asia. It was originally based in Changzhou city in Jiangsu Province, which is one of China's textile centers, and principally exports to the U.S. market. As early as 2005, the company felt the pressure of rising production costs in China and set up factories in Cambodia. Today, it has thirteen plants in Cambodia, employing 20,000 workers. Yet, the wage there also grew, from \$40 per month to \$150. And so the company, together with its clients from the United States, began to seek a new site for future production. It came to Tanzania through an old aid project, Urafiki Textile in Dar es Salaam, whose Chinese partner is from Changzhou as well. Tanzania's stable political situation, good relationship with China, and newly established special economic zone helped the CEO make up his mind. Within a year of the CEO's first visit in May 2011, the group opened its first factory in Dar es Salaam. By August 2013, the factory had hired over 1,000 local workers. All products are exported to the U.S. market.

Deficient facilities, unskilled workers, a weak industrial base, a cumbersome export process, and other factors in Africa are daunting hurdles for apparel makers to break into the international market.

JD Group is not the first Asian apparel maker to invest in southeast Africa to take advantage of AGOA. A Bangladesh company, Tristar Group, came to Tanzania in 2007 to set up an export-oriented business, but it closed down several years later. Such comings and goings are very common. What makes JD Group's movement remarkable is its sheer size. Previous investors from China, India, Pakistan, and other Asian countries have been small and medium-sized companies, sometimes even individuals. A number of the existing apparel factories are run by Asians who came to Africa as expatriate employees in apparel factories and later left the companies to open their own businesses. They are so flexible that they can detect small market opportunities and are nimble enough to respond quickly, but this also means that the scale of their impact is limited and they may move elsewhere when the environment changes. Unlike the small and medium-sized enterprises, the establishment of JD Group in Tanzania aims at long-term development. The manager admitted that the factory in Dar es Salaam has been losing money since it began operating, but the company was prepared for that. It is using the factory rather as an experiment to gather experience. This experience will soon be used to set up many more factories, just as JD Group got a foothold in Cambodia and then expanded. These gigantic factories with tens of thousands of workers are not a short-term investment, but production bases for at least twenty to thirty years.²⁷

During recent years, scholars have been discussing the trend of labor-intensive manufacturing shifting from Asia to Africa as a result of rising costs.²⁸ Apparel-making is considered one of the sectors with strategic importance for structural transformation because it does not require sophisticated technology and can provide large-scale industrial employment. Many African governments understand this point and actively attract foreign investment in this sector. But the rise and decline of the apparel sector in southeast Africa shows that not all the moves by Asian investors can lead to structural transformation. Small-scale investment seeking profit from subsidies can create a short-term boom, but such industrialization may go as quickly as it comes. Large-scale apparel factories (with over 10,000 workers) are not attracted by temporary subsidies, but instead evaluate the long-term investment environment. Exactly because of this, the arrival of JD Group in Tanzania has special implications: it signals that some heavyweight players in the industry realize that the time is coming to shift their manufacturing base to Africa. To be sure, very few enterprises have followed JD Group's lead, but it is not an isolated case either. In Ethiopia, one of the world's largest shoemaking groups, Huajian from Guangdong Province in China, set up a factory in 2011. Later, the company announced plans to invest \$2 billion over the next ten years to build a "shoe city" (shoe manufacturing zone) in Ethiopia.²⁹ Huajian and JD Group can be seen as pioneers exploring the possibility of establishing large-scale manufacturing bases

in Africa. Whether they are in the vanguard of a new trend or whether they will be another example of failure remains an open question.

Government and Policy

Countries in southeast Africa have been actively offering incentives to attract investors in the apparel-making sector. The main reason is that this sector can create large numbers of jobs. Resource-rich countries like South Africa and Botswana in particular have relatively abundant financing tools and are willing to subsidize the apparel makers to tackle their high unemployment rate.

Since 2010, South Africa has made a new effort to stabilize the declining clothing sector by launching the Clothing and Textile Competitiveness Program (CTCP). It has mainly two elements: the Production Incentive Program (PIP), which gives grants to fund modernization of manufacturing equipment and provide working capital, and the Clothing and Textile Competitiveness Improvement Program (CTCIP), which is supported by a

Countries in southeast Africa have been actively offering incentives to attract investors in the apparel-making sector.

partial grant. The state pays 60 percent for training technicians, and the factories pay 40 percent. In addition, the CTCP provides loans at a preferential rate to clothing, textile, and leather companies.

All apparel companies, no matter their origins, can apply for a CTCP grant. However, they are required to comply with the wage requirements of the national bargaining council. Since nearly all the Asian factories do not comply with the bargaining council requirements, they are rarely included in the program. Most of the grantees are factories owned by South Africans or individuals who worked in apparel companies and want to start their own business.³⁰ From August 2010 to March 2012, more than 1 billion rand in total (just under \$100 million) has been disbursed under PIP and the CTCIP. Botswana has similar incentive schemes, but with less resources. Lesotho and Swaziland also provide subsidies.

There are often problems with different incentive schemes. For example, the Botswana government provided loans with preferential interest rate for companies to finance the purchase of machinery. This policy did not work well. The stimulus was available for only two years, because banks require repayment within that period. Yet, when companies invest in machinery, they need more time to repay. Consequently, no company has made use of this subsidy. Another example is the duty credit certificate, which was used by Botswana before 2009. It was welcomed by enterprises, but the government found it difficult to monitor and easy to abuse. It was thus cancelled.³¹ Seeing the influx of small-scale Asian investors, Botswana now adds a threshold for investors from other continents. The government will welcome only those that can bring in capital and machinery and that have the financial capacity to meet certain criteria in the future. The reason is simple: the government does not want foreigners to compete with local small and medium-sized enterprises. Those

individual investors who are from overseas will be rejected, but small ones from neighboring countries will be accepted.³²

Finally, the customs and the tariff structure greatly influences the relationship between local apparel sectors in Africa and Asian companies. Illegal imports are still considered a threatening bottleneck of the region's textile-clothing industries. Though the tariff for finished clothes is 40 percent in Southern African Development Community (SADC) countries, there is serious underreporting and smuggling in the ports. Asian-owned factories in this region suffer from this kind of unfair competition as well. Meanwhile, the tariff for imported fabrics in SADC countries is 22 percent. Since most of the fabrics in CMT and CMP factories are imported, the high tariff raises the costs of local apparel production and reduces its competitiveness against imported clothes. It is under debate whether the SADC should eliminate the tariff on fabrics to save more jobs in apparel making.

Technology and Productivity

Asian companies import part of their equipment from Asian countries, and part—the sophisticated machines and advanced systems—from Europe. Because a lot of Asian supervisors had apparel-making experience in their home countries, they have introduced Asian ideas and practices to Africa. For investors in South Africa, Lesotho, and Swaziland, upgrading machinery and introducing new technology is mainly a problem of financial resources. There are abundant skilled technicians, as these countries used to have larger numbers of apparel factories. In Botswana, where the population is very limited (2 million) and the clothing industry is relatively small, even when managers try to upgrade machinery or bring in innovative systems, they have difficulty finding skilled workers to operate them. For instance, an investor from Sri Lanka bought an automatic cutting machine from Germany three years ago, but he could not find an operator. To be sure, the supplier can instruct and train several workers, but the investor needs a person who can maintain and repair the machine, otherwise the whole production line will stop if the machine has a problem.³³ In other countries, technicians are easy to find, but it is not easy to get good supervisors. Labor productivity in southeast Africa is said to be 30–40 percent lower than in Asia.

Almost all Asian apparel makers use a few trainers from Asia to train local workers in Africa. At the beginning, the ratio is normally one technician for 10–20 local workers. The Asian trainers teach operation skills and supervise new workers' performance. Their tutoring can significantly raise the efficiency of local workers.³⁴ After five to eight years, situations may vary widely. For medium-sized factories of approximately 300 workers, some have only five or six Asian supervisors; others have nearly twenty. This depends on the management styles of the companies. Some managers encourage localization, while

Labor productivity in southeast Africa is said to be 30–40 percent lower than in Asia.

others hope to keep a high level of productivity. Because there used to be so many Asian companies and so many Asian trainers in the apparel-making clusters in South Africa, Botswana, Swaziland, and Lesotho, factories often do not need go to Asia to find trainers, but can find expatriates from other factories. A company may also recruit expatriates from different Asian countries. For example, a Taiwanese factory hires supervisors from Hong Kong, mainland China, Bangladesh, and the Philippines. Another source for skilled workers is Zimbabwe, which used to host a big clothing sector but lost nearly all of it due to political reasons. Asian companies in Botswana welcome Zimbabwean technicians who are used in core technical operations.

Besides machinery and training, Asian companies pressure management to improve productivity. A Chinese manager in South Africa revealed that the profits of CMT factories depend on correcting management loopholes, speeding up production, and delivering products on time, thereby avoiding penalties. Another Chinese manager in Botswana pointed out the uniqueness of management in Africa, “production costs in Africa cannot be calculated, but can only be worked out.” In China, a manager can calculate the quantity and quality of his workers’ output every day, but this cannot be done in Africa. One day, a production line may produce 500 pants; another day, it may produce just 400 pieces. The defect rate and product quality also fluctuate greatly. Management of workers is therefore directly related to every day’s cost and profit. Asian supervisors have improved the productivity of the apparel sector in the region through their intensive tutoring and monitoring.

Society and Environment

The clothing industry is one of the biggest job creators in southeast Africa, particularly for women. Ninety percent of the employees in clothing factories are female. Moreover, these women are often breadwinners for a big family. Interviews with local workers revealed that many single mothers need to support five or six members of the family.

Thus the wages and employment in apparel factories not only affect the workers’ income, but have ripple effects on much of the population in the region. It is true that the wages paid by apparel industries are pretty low. Some workers earn less than 1,000 rand (less than \$100) monthly. The CMT and CMP factories are usually especially labor-intensive. An experienced worker can make more, on average about 2,000 rand per month including all benefits. Workers can supplement their earnings with support from the government through, for example, subsidies for children.

In this context, the worker unions and bargaining council proposed to raise the minimum wage for workers in the textile and clothing industries. Asian CMT and CMP factory owners regard the new wage standard as impossible to comply with, as their profit margin is very low and they would be likely to leave South Africa if it is enforced. Thus, during the dispute between enterprises and

worker unions, a large number of factory workers stood by their employers and rejected the new wage standards because they fear losing their livelihoods.³⁵ In Botswana, the unions' influence is lower, but business owners complain about an unfriendly attitude by the government toward employers. It is said that one permanent secretary of a ministry warned people to be wary of private businesses because their only interest is their profit. He thought that these companies should think about the development of the country and the employment of its people. Investors consider this attitude imprudent. From their point of view, businesses should focus on their target of making a profit, and only after this objective is achieved will jobs be created and development be sustainable.³⁶

The turnover rate in some clothing factories is as high as 30–40 percent per year on average. In others it is much lower, with many employees working in the same factory for more than four years. The reasons for the difference are not clear. The low wage is not the only reason. Factory owners theorize that public transport in southeast Africa may be an issue because it is inconvenient and expensive. Workers may choose a lower wage job to save time and transportation costs. Also, factory work is physically heavy, and workers may prefer less strenuous jobs in a supermarket or shopping mall even when those new jobs do not pay as much.

As clothing factories close down or move away, a number of unemployed workers have tried to start their own businesses. In South Africa, many applications for the CTCP program are from previous factory supervisors, but the competition is fierce and so success is very limited. In Botswana, many female workers set up their own businesses after working in factories. During the past five years, more than 100 such microenterprises were created to serve rural local markets (villages), as imports have not yet penetrated into all the corners of the rural area. But the former workers were familiar with only specific parts of the assembly line production. Such lack of knowledge causes many of the micro-, semiautomated enterprises to fail. Increasing competition from Asian vendors and imports in some parts of the rural areas raise new challenges, too. The government tries to organize the microenterprises together with a school uniform project and encourage associations to provide training and assistance for them.

The director of Botswana Exporters and Manufacturers Association, Gideon Phiri, commented that Chinese enterprises have brought a new work ethic to Botswana, but this needs to be adjusted to the local culture. Chinese ethics, he said, is to do and not to talk, yet the Chinese employers have a tendency of not learning the local culture, which fosters resentment among local workers. Consequently the Chinese employers fire local workers, and that only leads to bigger conflicts.³⁷

Case Study 2: Newcastle Apparel-Making Cluster

Newcastle is a town in KwaZulu-Natal Province, South Africa. In the 1970s, it had a big steel plant that employed 30,000 workers. In 1982–1983, the plant was privatized and more than half of the employees were dismissed. The city thus tried to attract other employers. Agriculture and textiles were considered because those sectors are easy to set up. In 1985–1987, when apartheid was still in effect and severely limited South Africa's relationships with other countries, the city tried to get investors from Taiwan. The municipality sent a delegation and set up an agency there. Taiwan is good in jersey making—a lucrative market segment because no firm was making jersey in South Africa at that time. Most Taiwanese companies arrived during the 1980s. Though West Cape remained the center of textile and clothing in South Africa, it was not as proactive as Newcastle. Services provided by the municipality were attractive for investors, as many of them cannot speak English. As a Taiwanese businessman put it, the director of the economic development department in Newcastle “was willing to go an extra mile to help investors.” For example, he assisted Taiwanese investors in their dealings with the South African revenue service on taxation issues. The Taiwanese investors then brought their relatives and friends. About 40 percent of the companies were attracted by market initiatives and 60 percent through word of mouth.³⁸

Asian apparel factories from Taiwan, Hong Kong, and Singapore used to export a lot before 2002, when the exchange rate of the rand with the U.S. dollar was 12:1. Over the ensuing years, the rand became much stronger and the rate rose to 7:1. AGOA also contributed to the demise of the apparel industry; once South Africa was classified as a more developed economy, it couldn't use imported fabrics for duty-free export to the United States. Factories turned to local fabrics instead, but that drove the cost of the finished product higher than in neighboring Lesotho and Swaziland. Ultimately, the large factories all closed down in 2006 and 2007.

Now small CMT companies from mainland China make up the clothing sector in Newcastle. Many of them have settled in Medadeni, an industrial zone that offered six months' free rent and six months' reduced rent. All of the spaces in the zone were taken within five years. However, the municipality has nothing left to offer to attract foreign direct investment. Many of the new investors from the mainland used to work in the old factories of Taiwanese and Singaporeans. They started their own business after several years of work experience. In 2013, about 70 textile and apparel companies hired approximately 5,000 workers in total, about a quarter of the manufacturing jobs in Newcastle. The businessmen who came to Newcastle more recently from mainland China are not interested in investing in manufacturing. They prefer to import products from China to sell in the local market, as that has less risk and a fast return on investment.

Newcastle became a hot spot in the international media in 2010–2011. In August 2010 and October 2011, the National Bargaining Council shut down several Chinese-owned factories to enforce compliance with the bargaining council's minimum wage. To protest the raids, dozens of Chinese employers, together with some employers of South African and Indian origin, closed their factories and locked out thousands of their workers.³⁹ The Chinese companies maintained that the employer representatives in the bargaining council are often in the higher-margin clothing sector, which are more able to pay the council's minimum wage of

550 rand (a little over \$50) per week than the low-margin CMT factories. If the rate had been enforced, all of the Chinese factories would have closed down.

The chair of the Newcastle Chinese Chamber of Commerce and Industry, Alex Liu, got in touch with enterprises in the area that had similar problems. In total, 259 noncompliant factories in Durban and its neighborhood that made up the United Clothing and Textile Association (UCTA) and five Chinese companies launched a court case against the minister of labor, the National Bargaining Council, and the South African Clothing and Textile Workers' Union (SACTWU) to challenge the wage agreement and the bargaining council system. In March 2013, the High Court ruled in favor of the Chinese employers and the UCTA. Still, Liu admitted that the judgment cannot radically change the situation of the Chinese employers facing the powerful SACTWU and bargaining council. And although Newcastle municipal officials have been supportive of the Chinese investors, they cannot help much on the labor issue, which is managed by nationwide institutions.⁴⁰

On the environmental front, apparel factories have little pollution except for the boilers. The inspection of boilers in southeast Africa is quite stringent. Owners of some small and medium-sized factories complain that the inspection is burdensome for them.

Textile Sector

Market

Textile is the weakest linkage in the whole value chain in the southeast Africa region. Because of its weakness, the cotton and apparel sectors are virtually two separate industries that rarely have connections with each other. The majority of cotton is exported to Asia, and the apparel sector imports almost all of its fabrics from Asia. The remarkable absence of a textile sector begs questioning and investigation.

Decades ago, the region had an established textile sector. South Africa's textile industries, in fact, used to be the same size as the clothing industries. In 2004, the textile sector sales were 17.4 billion rand, exceeding the 16.6 million rand in clothing sector sales. But today, under the pressure of Asian imports, only a small number of the textile companies are left. Even among the remaining players, many of them do not produce fabrics for attire, but make seat belts and other special high-value fabrics. In Zimbabwe, textile outputs accounted for over 10 percent of the country's manufacturing production in the 1980s and 1990s, more than that of the clothing and footwear sectors combined.⁴¹ But amid the political tension of the past two years, the sector has been declining. Zambia used to have six spinning mills with a peak capacity of 23,500

metric tons in 1997, but none is operational now.⁴² In 2009, 10 percent of textiles was still produced in Zambia (Schwaps Spinning and Mukuba Textiles in the copperbelt provinces, both run by Indian Zambians), but the mills are closed now. Several small mills in Zambia produce curtains and blankets to supply the local market. These kinds of products have large volume and low value so the local producers can survive the competition with Asian imports. Botswana is too small to host significant textile mills.

The only exception is Tanzania, where a vibrant textile sector is still functioning. This is partly the heritage of Tanzanian government's heavy investment in the textile sector from the 1960s to the 1980s and partly the result of the successful privatization of the textile industries since the 1990s. There are currently sixteen mills in operation as of August 2013 (see appendix 3). One of them is a joint venture with China (see case study 3), and most of the others are run by local businessmen of South Asian origins. The production capacity of the whole textile sector increased from 31 million square meters in 1995 to 150 million square meters in 2008.⁴³ Tanzania's textile mills mainly produce traditional woven fabrics such as Kanga and Kitenge to serve local and regional consumers. The market demand is high as the population in the region is large and the supply is comparatively small (some Kanga and Kitenge are imported from India and elsewhere, but the amount is small). Many factories are running at full capacity, especially after the harvest season. The main threat for the fabric makers is the import of cheap secondhand clothes. With the strict implementation of a 25 percent tariff on secondhand clothes, the situation has improved.⁴⁴

Raw material supply is a bottleneck for textile mills. They have to compete with foreign buyers for cotton. In the meantime, these mills cannot provide fabric for the apparel industries either. There are currently two apparel factories in Tanzania, JD Group and Winds Group. Neither sources its fabrics from local mills but instead imports all the raw materials. Winds Group requires knitted fabrics, which is not produced by local mills. JD just arrived and is not confident about the local supply. Several apparel factories were established in Tanzania before, and they rarely sourced local supply either.

In South Africa, some of the remaining mills are producing knitted fabrics for apparel producers, but their operations face difficulty. One Taiwanese company, Taiyuan Group, set up a mill in Ladysmith (near Newcastle) in 2005. According to the CEO in a 2013 interview, the group was originally attracted to South Africa by AGOA and hoped to export to Europe and the United States. But after the operation began, Taiyuan Group found many problems: costs and salaries are very high, worker unions are very powerful and often organize strikes, the production rate is less than half of that in mainland China, and even with the duty exemption, the products could not compete in the international market. Thus it gave up the export plan and mainly sells its products in South Africa and SADC countries. The CEO regretted making the investment, saying, "If we had done a better investigation, we would not have

invested here.” The company stuck it out only because the investment already had been made.⁴⁵

The CEO also noted that the quality of South Africa’s fabrics is good, in that most of the machines are imported from Europe and Japan and are of good quality. South Africa imposes a 22 percent tariff on imported fabrics, thus the local fabrics are competitive in price in the domestic market. Moreover, they have advantages regarding availability and timing. Yet, South Africa has only a small number of textile mills. The variety of products is very limited. Mainland China has a complete value chain, a vast number of mills, and plenty of accessory suppliers. As a result, many apparel makers still have to import fabrics from China and other Asian countries. Besides, illegal imports and underreporting at customs checkpoints are harming the local market. South African mills get their cotton supply mainly from neighboring countries, with the supply fluctuating depending on the weather. Sometimes the supply can be tight.⁴⁶ In the CMT clusters, there are some dyeing companies run by Asians. These companies are profitable, but they have made only a small-scale investment.

In Tanzania, some of the apparel and textile enterprises have ambitions to move along the value chain. JD Group has plans to establish a mill in Tanzania if its experimental apparel operation can succeed. JD Group currently imports all of its fabrics. If it scales up production after a successful experiment, it will be economically reasonable to have a local supplier. Likewise, owners of a local textile giant, 21st Century Textiles, which is based in Morogoro, are thinking about expanding to a knitting mill and apparel-making factory. They aim to develop a whole value chain that will finally enable them to export to Europe and the United States. Additionally, China-Africa Cotton is planning to set up a spinning mill in Mozambique to overcome the problem of import quotas in China.

Government and Policy

Governments’ attitudes toward the textile industry vary. Officials in Botswana made it clear that the government there is not looking to set up mills. Textile mills require a huge investment, and small countries like Botswana that lack a cotton supply cannot host a large number of mills. Thus they cannot compete with Chinese companies in variety and volume. Botswana prefers to import fabrics. The Botswana officials believe that China will move the clothing sector out but stay involved in the fabric sector. If Botswana can develop a strong clothing sector with imported fabrics and accessories, the government will be happy. CMT and CMP models are thus welcomed by Botswana, as people don’t need to worry about fabrics. The purpose behind the development of the clothing sector is simply employment, technology transfer, and rural development.⁴⁷

South Africa’s government is debating whether to reduce tariffs on fabric imports. Although a 22 percent duty on fabrics helps local mills in their competition with foreign imports, it also raises costs for almost all domestic

apparel companies and weakens their competitiveness against imported clothes. Therefore, whether to eliminate the duty on fabrics is in effect a choice between the textile sector and the clothing sector. If the textile sector is protected, the clothing sector will suffer. Since local employment in the textile sector is much smaller than that in the clothing sector—45,319 in textiles and 97,544 in clothing in 2005⁴⁸; in 2013, the gap may even be larger, with talk of 20,000 employees in textiles and approximately 100,000 in clothing—the government is thinking of eliminating the fabric duty to save the domestic apparel industry.⁴⁹

By comparison, Zambian officials want to revive their textile sector. Chief economist in the Ministry of Industry John Mulongoti said that Zambia is doing fine with cotton growing to ginning but that the spinning sector is problematic. He believes that southeast Africa does not need many mills, just one or several big spinning factories. Zambia is well situated for such regional mills, as it is geographically located in the region's center, has a strong cotton sector, and politically is peaceful and democratic. China used to support a large integrated textile mill in Mulungushi. Although the mill was closed in 2006, many Zambians remember it fondly and politicians also mention it often. Zambians are eager to restart operations in Mulungushi and hope that the close and long-lasting friendship between China and Zambia can help make that happen.⁵⁰

In Tanzania, the government has set up a Textile Development Unit with the help of the Tanzania Gatsby Trust, a charity that supports small and medium-sized enterprises. The unit received funds from the United Kingdom for two years, and the Ministry of Industry will probably fund the unit for two more years. The unit aims to help existing industries become more vibrant and to attract foreign direct investment. Its activities cover the whole value chain of cotton-textile-attire. During its first year, the unit worked with customs officials to strengthen the inspection of underreporting and launch a campaign against illegal imports. It was also coordinating with the cotton board to solve the supply shortage of cotton for local textile mills. It facilitated the investment of JD Group and Dahong Textile, and the planned investment of Nitori from Japan. The unit believes that the climate for the textile industry is now good.⁵¹

Malawi and some other countries also want to build textile mills, but an undependable power supply and a low level of labor skills are major bottlenecks for these countries.

Technology and Productivity

Taiyuan Textile in South Africa employs 500–600 people in its spinning section. It has four or five managers from Taiwan and 20–30 technicians from the mainland. The technicians are doing such work as training, machinery adjustment, and maintenance. Yet, the CEO thinks that it is difficult to train local employees in these skills. Some previously trained workers disappeared

suddenly due to illness or other unclear reasons, so the company is frustrated and no longer willing to invest in training local workers.

In Tanzania, Chinese-aided Urafiki Textile has been operating for over forty years. Many local employees have spent their entire work lives there. Thus they are already skilled in operations and maintenance. Chinese employees are no longer needed in the workshop and the number of Chinese expatriates has been reduced from about sixty to eighteen. The remaining Chinese are all managers of various departments. But the productivity of the workers in the plant is low in comparison to that of Chinese. The Chinese general manager, Wu Bin, sees the potential of raising productivity by improving management. For example, with the same people, same equipment, and same power consumption, a 10 percent acceleration of machines can result in a 5 percent savings in cost. But this may increase the cost of maintaining the machinery. He thus hesitated to do this. Besides, the skilled workers are aging, and there is a shortage of new technicians.

In the newly established mills in Tanzania, the situation is different. MeTL Group is the largest textile producer in sub-Saharan Africa with four textile mills (three in Tanzania and one in Mozambique). The group is owned by an Indian Tanzanian. The four mills in total have 2,500 workers. Seventy-five of them are expatriates, mainly from India and Pakistan (originally there were 20 expats, and the number increased along with the mills' capacity). All them fill technical positions, handling difficult tasks and training locals. The production of knitting fabrics is particularly difficult. Thus, no mills in Tanzania produce such products. MeTL Group has plans to establish a knitting mill. More Indians will be brought in to train Tanzanian workers.

Society and Environment

Textile mills, like apparel factories, are labor-intensive. Asian mills on the one hand create thousands of jobs for local communities. On the other hand the companies with low margins tend to fix the workers' wages at a low level. This sometimes causes conflicts with local workers' unions and labor authorities.

Textile mills, especially in the weaving, dyeing, and processing stages, may be producing pollutants. Environment requirements in South Africa and Botswana are actually more stringent than those in many Asian countries. Asian investors in general are able to meet the local requirements. More than half of their machines are imported from Europe. In Tanzania, the environmental regulations are not as strict. Some old companies still use machines from the 1980s and 1990s, while the newer larger mills have sufficient financial resources to import machines from Europe and have better control of waste emissions.

Case Study 3: Urafiki (Friendship) Textile Mill

Urafiki Textile was a Chinese aid project handed over to Tanzania in 1968. When the mill's operations ran into difficulty in the 1980s, a Chinese partner was reintroduced to form a joint venture in 1995. The Chinese partner, Changzhou Textile Group, paid for all the factory housing and machinery, and took a 51 percent ownership share. The Tanzanian government provided the land and took the remaining 49 percent share. The new mill started to operate in April 1997 with a \$100 million commercial loan from the Export-Import Bank of China.

The mill achieved good sales in 1997. Urafiki's managers claimed that this helped Tanzania push forward the privatization of the textile sector. All thirteen textile mills were quickly sold to private companies and reopened. The entire textile market began to prosper. But this also led to fiercer competition. Urafiki was profitable only in 1997. Another \$100 million loan in 2003–2007 was used for technical upgrades, including production machinery, generators, boilers, the electric grid, and the water grid. Urafiki repaid part of the loans and then stopped due to financial difficulties.

The sales of products is actually not a problem, as demand is larger than supply. There was a period when products could not be sold, but now Urafiki can easily sell out of its products thanks to the brand and long-term efforts. The key problem is labor management. In 1997, the new management selected 1,900 workers out of nearly 4,000 former employees. However, a large number of them were permanent workers and could not be laid off. The Chinese general manager complained that these workers “had obsolete ideas and low productivity.” The qualified production rate in Tanzania was only 40 percent compared with 90 percent in China. The workers' union nonetheless demanded a salary increase and more welfare benefits. The managers felt that the workers' union did not care about the economic efficiency of the company, for the union assumed that the Chinese would not let this “child of Mao and Nyerere” fail, that the political significance would outweigh economic considerations.⁵² As a “model enterprise,” the mill pays the equivalent of 16 percent of the workers' total income to cover the labor insurance and pension insurance of its workers. Besides, it cannot act purely according to market rules. Consequently, the mill missed several chances to expand its size or its business areas. Therefore, despite good sales, it still suffers losses due to the high costs.

The Chinese manager found that other private enterprises can deal with workers' unions through various approaches, but unions in “model enterprises” such as Urafiki are particularly powerful. For instance, in October 2007, the Ministry of Labor raised the minimum wage for the textile sector from 57,000 shillings to 150,000 TSh base salary plus 65,000 TSh welfare. The 210,000 TSh total was too much for the textile industry. Owners of all fourteen mills protested. They argued that the minimum wage modification was based on a faulty labor report. The minister of labor agreed to give exemptions for the mills in 2008 and then readjust the minimum wage to 80,000 TSh in January 2010. However, the national workers' union and the sub-union in Urafiki accused the Ministry of Labor and the Urafiki mill in a lawsuit of violating the constitution. The court ruled in favor of the unions and ordered Urafiki to compensate its workers. Other mills were able to negotiate with the unions privately to settle the dispute, but Urafiki, as a joint venture with the government, was not able to settle it through negotiation. The mill and the ministry appealed to the High Court. As of June 2014, the appeal has not been decided. If the appeal is rejected, Urafiki must pay

billions of shillings and won't be able to sustain operations because of the high costs. Urafiki's Chinese and Tanzanian managers both know that the wage paid to the permanent workers is meager. Yet low productivity and the stubborn labor system make salary increases impossible.

A private Chinese textile company, Yuemei Group from Zhejiang, has been in discussions with Urafiki since 2011 to take over the mill. A framework agreement between Yuemei and Urafiki's Chinese partner was signed in 2012. Yet, Yuemei insists on taking over the mill in its entirety, not engaging in a joint venture with the Tanzanian government. The Tanzania government, however, does not accept that arrangement and hopes to keep this historic project of Sino-Tanzanian friendship. Thus the takeover process remains stalled.

Conclusion

Facing Asian competition, the textile and apparel sectors in southeast Africa keep shrinking in general. Traditional production bases in South Africa, Botswana, Zambia, and other countries have not yet found a good path of growth. In terms of global competition, southeast Africa continues to lose market share in general as a result of the liberalization of international trade and rising labor costs at home. Though the export figures may fluctuate among various countries, they are mainly affected by changes in subsidy policies and by investors' movement within the region. Though production costs are rising in Taiwan and mainland China, most of the manufacturing capacity has been shifted to Bangladesh, Vietnam, Cambodia, and other Asian countries. The Asian products are not only grabbing a greater share of the international market, but also flooding into southeast Africa's domestic market, dealing a further blow to the local textile and apparel sectors.

To be sure, some local companies are able to retain some market share with their irreplaceable advantages, for example, in the market of fast fashion, uniforms, work wear, and traditional fabrics in the domestic and regional markets. Although these markets remain profitable, they are relatively small. The modest size of the market and the limited amount of production can hardly drive long-term structural growth. Many of the companies have to depend on imported raw materials, accessories, and machinery, as the local demand is insufficient to encourage suppliers to invest locally. Conversely, the dependence on imported supply increases the costs of production in the region and hinders growth of the sector.

The lack of scale is a major obstacle for the growth of the textile and apparel sectors in southeast Africa. Smaller enterprises cannot compete with the immense Asian manufacturers in terms of price. They have less bargaining

power with suppliers and have little support locally. This manifests itself as disconnected development along the value chain and scattered industrial spots across the region. Without integrated or orchestrated industrialization, existing investments inevitably encounter bottlenecks for growth and are overwhelmed by the Asian giants in various respects. At the same time, the lack of scale is caused by uncompetitive labor costs, unavailability of skills, insufficient infrastructure, inconvenient transportation, and other reasons. The small scale and declining sectors reflect the structural problems in the region. A solution cannot be easy or quick.

The development of a cotton-textile-apparel value chain is eagerly desired and actively supported by the governments in southeast Africa. Two main goals of African governments are employment creation and value addition. Yet, their policies often focus on a country's immediate or short-term interests. It is not difficult to create a temporary boom in cotton production or the apparel sector, but incentives often cover structural deficiencies and delay the solution of the real underlying problems.

It is not difficult to create a temporary boom in cotton production or the apparel sector, but incentives often cover structural deficiencies and delay the solution of the real underlying problems.

Nonetheless, the region still has opportunities to revive the value chain or even surpass the previous scale of the textile industries. Continuously rising costs in Asia are forcing more manufacturers to consider relocating production. A number of them first moved from China to Vietnam and Cambodia, but the wage level in Southeast Asia has been increasing rapidly as well. They thus are turning to Africa to explore the possibility of establishing production there. Some Chinese cotton producers are planning to move other parts of the value chain as well to take full advantage of the region's abundant resources. However, this does not mean that they will certainly move to Africa in the future. The pilot projects may fail, just as many previous experiments in Africa's history have done. In order to attract and keep long-term investors, African countries need to work more on structural improvements to create a favorable general environment instead of merely offering incentives.

The encouraging message is that Africa has some unique advantages for Asian investors. First, in comparison with Asia, Africa's location is physically closer to the European and American markets. Africa also enjoys more favorable trade policies with the European Union and the United States; textile products made in Africa can enter these markets at lower costs and face fewer tariffs than if they were coming from Asia. Today's African market of textile manufacturing has less competition as well. Asian investors, particularly the large ones, can easily enjoy the status of being market leaders in African countries. Meanwhile, the huge population and immense space in the continent provide great potential for manufacturers to develop. And Africa's rich natural resources and low labor costs are very attractive to Asian investors.

Nonetheless, chronic problems still plague the African countries and keep potential investors away. Unstable political and security situations are the primary concerns for Asian entrepreneurs. A lack of economic interchange and integration among neighboring countries make the regional markets in Africa fragmented. Deficient infrastructure and poor worker skills severely reduce the productivity level in Africa, offsetting the continent's advantage of rich resources and low labor costs. Last but not least, cultural barriers between Asia and Africa are daunting for many Asian investors.

This comparison explains why Chinese entrepreneurs may prefer to move their factories to Southeast Asia in the near future. But it also shows that those Chinese companies that have the foresight for long-term development may choose Africa as their next destination. African governments need to specify their goals and choose the right strategies if they hope to attract and encourage more investment from Asian textile manufacturers. The actions they can take include:

- Investment promotion and subsidies can attract small and medium-sized Asian apparel enterprises within a short period. A short-term investment can stimulate the manufacturing sector, but small enterprises, with their flexibility and location, are more suitable for local markets. To increase their competitiveness, the government can support these enterprises in building clusters. Clusters can have certain benefits of economies of scale, and they can attract suppliers and buyers to the new area.
- If a country prefers long-term development, temporary tax holidays won't help much. The emphasis instead should focus first on the political structure, such as security, diplomatic relations, labor regulations, and openness toward foreign investment. Large investors are not interested in Africa's small local market; they have the experience and economies of scale to serve the global value chain.
- Because lack of scale is a major bottleneck for the development of the African textile-apparel industry, governments need to put more emphasis on fostering large scale factories. One possibility is to use an OEM (original equipment manufacturer) model to produce exports to the global market. This approach used to be the main driver for the growth of the textile and apparel sectors of the Asian Tigers, China, ASEAN countries, and Bangladesh. A couple of Asian enterprises have experimented to relocate their manufacturing capacity to African countries, such as the JD Group in Tanzania. A comparable example is the Huajian shoemaking company in Ethiopia. Lessons should be drawn from both of these pioneer projects and applied to other countries to attract similar large-scale investments.

- Government's service to factories, such as Newcastle in the 1980s or the special economic zone in Tanzania, where JD Group and several other Asian factories settled, plays a big role in attracting new Asian investors. Investors eagerly accept support from government officials and would be delighted to find that the officials are thinking of their needs and are "on their side." They will be frustrated if they feel the government just wants to use them to create jobs or to get revenue from them.
- Government should pay special attention to labor relations, as this is a decisive question for apparel makers. Asian investors favor a job responsibility wage system, in which the job is the main determinant of income, instead of daily or hourly wages. For the textile sector, a dependable power supply is of particular importance.
- Along the entire value chain from cotton to apparel making, Africa's particular weakness is in textile processing. However, it has opportunities as well. Currently, a large amount of cotton is exported to China from Africa, and a large amount of fabric is imported to Africa from China. The raw materials travel tens of thousands of kilometers just for two or three steps of processing. Southeast African countries could avoid this long detour if qualified and efficient textile mills were built in the region. However, mills require a huge investment and a variety of products. Previous failures have been costly lessons. Today's governments and enterprises need to be more pragmatic about building new mills. Coordination of the upstream and downstream producers will be helpful. The payoff is potentially significant: building the missing link of textile processing could create jobs, boost the economy, and put Africa on a path of sustainable growth in the cotton-textile-apparel value chain.

The impact of Asian countries on the development of the cotton-textile-apparel value chain in southeast Africa is not one-dimensional. While Asian competitors continue challenging Africa's indigenous enterprises, they also increasingly provide Africa with co-development opportunities. Facing a changing global value chain, African countries need a clear vision and tailored policies to make the most of their opportunities to ensure sustainable industrialization and comprehensive development.

Appendices

Appendix 1. Ginners in Zambia, 2013

Company	Origin	Notes
Dunavant	U.S.	Global Operation, market leader in Zambia
Cargill	U.S.	Global Operation, one of top 2 players
China-Africa Cotton Co. (previously Chipata Cotton)	China	Medium size, entered Zambia in 2003, growing fast
Olam	Singapore	Global operation, partnership with Continental
Continental (acquired by Parrogate Group)	India	Medium size, partnership with Olam
Alliance	Kenya	Medium size, operations in various African countries
Grafax	India	Medium size, entered Zambia around 2012
AST	China	Small size, entered Zambia around 2012
AGDB	China	Medium size, entered Zambia around 2012
Justina	Zambia	Small size and long operating
MFGP (Mumbwa Farmer Ginning and Processing Association)	Zambia	Small size, established by farmers in 2011

Source: Field research and interviews, July–August 2013

Appendix 2. Ginnerers in Tanzania, 2013

Company Name	Origin*
Copcot Cotton Trading	
Nyanza Cooperative Union	
Alliance Ginneries Ltd.	
Bibiti Ginneries Ltd.	
Birchand Oil Mill	
S&C Ginning Co.	
Olam Tanzania Ltd.	Singapore
Afrisian Ginning Ltd.	
S.M. Holdings Ltd.	
Fresho Investment Co. Ltd.	
Chesano Cotton Ginnery	
Vitreco Oil Mill	
NGS Investment Co. Ltd.	
Aham Investments Co. Ltd.	
MSK Solutions Ltd.	
Buisustain Tanzania Ltd.	Germany
ICK Cotton Oil Co. Ltd.	
KBL Enterprises Ltd.	
Nida Textile & Oil Mill	
Nsagali Co. Ltd.	
New Sam Trust Co. Ltd.	
Louis Dreyfus Commodities	U.S.
Gaki Investment Co. Ltd.	
Hassanal Walji	
bioRe Tanzania Ltd.	
Kahama Cotton Co. Ltd.	
Al-Adawi Co. Ltd.	
Integrated Cotton Field Ltd.	
Kahama Oil Mills	
Roko Investments	
Badugu Ginning Co. Ltd.	
Busangwa Organic Farming Association	
Jambo Oil Mill	
New Ubora	
Kisumwa Machinery Co. Ltd.	
Shinyanga Region Cooperative Union	
Vearrian Tanzania Ltd.	
Nyanza Cotton Co. Ltd.	
Simon Agency Ltd.	
Mwatex (2001) Ltd.	
Sibuka FM Ltd.	
Igunga Cotton Ltd.	
Manawa Ginneries Co.	
Lisha Investment Tanzania Co. Ltd.	
Dahong (not in operation yet)	China

*Significant non-African investors' origins are identified. The remainder of the companies are either Tanzanian or from neighboring countries including Rwanda, Uganda, Kenya, and Zimbabwe.

Sources: Tanzania Cotton Board and interviews, August 2013

Appendix 3. Textile Mills in Tanzania, 2013

Company	Location	Specialty
Afritex Ltd.	Tanga	Integrated
A to Z Textile Mills	Arusha	Mosquito net, apparel, cement bags
Urafiki (Friendship) Textiles	Dar es Salaam	Integrated
Jambo Spinning Mills	Arusha	Yarn
Karibu Textiles	Dar es Salaam	Processing
Kilimanjaro Blankets	Tanga	Blankets
LN Knitweave Ltd.	Dar es Salaam	Knits, baby napkins
Mazava Fabrics	Morogoro	Apparel for export
Morogoro Canvas Mill	Morogoro	Canvas fabrics
New Musoma Textile	Musoma	Ginning, fabric dyeing, and finishing
New Mwanza Textile	Mwanza	Integrated
Sunflag Tanzania Ltd.	Arusha	Integrated, apparel
21st Century Textiles	Morogoro	Integrated
Nida Textile	Dar es Salaam	Processing
Namera Textiles	Dar es Salaam	Spinning and weaving
Tabora Textile Mill	Tabora	Spinning

Source: Textile Unit, Tanzania Ministry of Industry

Notes

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- 16 Interview, CAC manager, Zambia, August 2013.

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- 19 Interview, director of crop development, Ministry of Agriculture, August 2013.
- 20 Interview, general manager, China-Africa Cotton, Zambia, August 2013.
- 21 Interview, general manager, China-Africa Cotton, Zambia, August 2013.
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- 23 One reason for family members to contract with different companies is so that they can have different sources of income.
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