Can Sub-Saharan Africa Leap into Global Network Trade?

Uma Subramanian1 and Matthias Matthijs

ABSTRACT

This paper examines opportunities for Sub-Saharan African countries to effectively participate in globalization, particularly given the increasing interest of China and India in Sub-Saharan Africa. How could Sub-Saharan Africa fully engage and gain benefits from global network trade? Over the last 15 years Asia has become Africa’s fastest growing export market. Asian countries are much more open to trade than Europe or America. There seems to be no evidence to suggest that this trend will not continue in the near future. We acknowledge the numerous caveats in Asia’s growing interest in the African continent; not least the “resource curse” of exports that are heavily concentrated on oil, minerals and raw materials, as well as the fierce competition from Asia’s cheap manufactured exports. However, we believe that there is strong evidence to suggest a clear potential for South-South cooperation in trade and investment. Drawing on evidence from our extensive research into international value chains, we identify five “critical factors” for effective participation in global network trade: price, speed-to-market, labor productivity, flexibility and product quality. Underlying competitive performance of these critical factors are a country’s policies and institutions. Effective policies, efficient institutions and the necessary infrastructure will ensure the best outcome for trading countries. In order to improve the depth and sustainability of these five critical factors, it is critical that developing countries create a supportive policy and institutional framework from the outset.


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1 FIAS, World Bank Group. Please contact usubramanian@worldbank.org for any comments.
“Africa looks to China and sees success: according to the World Bank, the Chinese have lifted 400 million of their own people out of poverty in the past two decades. All the while, no one forced the Chinese government to have elections or allow its opponents to start newspapers. […] The Chinese come to Africa as equals, with no colonial hangover, no complex relationship of resentment. China wants to buy; Africa has something to sell. If African governments could respond in a way which spreads the new wealth—a large if, of course—then China might provide an opportunity for Africa which Europe and America have failed to deliver.”

(Lindsey Hilsum)
United States, also has a preferential trading agreement with Sub-Saharan Africa, signed into law in 2000 as AGOA (African Growth and Opportunity Act). The Act offers many tangible incentives to African countries in an effort to “continue their efforts to open up their economies and build free markets.”

Many countries that have seen rapid growth over the last fifteen years (especially in Asia) have done so by making the transition from labor-intensive, low-value-added production (e.g. agricultural products, primary commodities) into higher stages of the value chain, i.e. capital-intensive, high-value-added products (e.g. manufactured products, automotive parts). Sub-Saharan Africa hardly figures in exports of apparel to the US and EU markets (Figures 3 and 4). There are no African countries represented in the top 25 exporters to the U.S. market (Egypt is 27th, Lesotho is 30th and Kenya 32nd – all with less than 0.4% of market share). The same is true for the European market. Both in Europe and America, African producers have seen growing competition from the emerging economic giants in Asia (e.g. China, India, but also Bangladesh) – even after taking into account their respective preferential trading agreements, Cotonou and AGOA.

The same picture emerges if we look at the world’s main exporters of automotive parts. The only Sub-Saharan African country represented in the top-50 exporters is South Africa.

**Figures 3 & 4**

![Figure 3: U.S. Apparel Imports by Origin (2005)](image1)

![Figure 4: E.U. Apparel Imports by Origin (2005)](image2)


Oil still dominates exports from Sub-Saharan Africa, together with primary commodities such as platinum, diamonds, and cocoa. The only exception is woven and knit apparel. If Sub-Saharan Africa wants to move up in the value

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5 With the exception of North Africa: Tunisia, Morocco, and Egypt
chain and increase its overall value added, it will have to diversify its production, and move out of traditional primary commodities into manufactured goods.

2. Asia’s Growing Interest in Sub-Saharan Africa

A. Analytical Framework: Trade, Investment, Aid

Although Sub-Saharan Africa’s total trade with Asia is relatively small by comparison with its trade with Europe and the United States (see figure 2 above), it has grown at an incredibly rapid pace, especially from 2001 onwards (figure 5). Indeed, Asia has become Sub-Saharan Africa’s fastest growing export market destination almost overnight, growing more than 10% on average during the last fifteen years. Since 1995, we have witnessed a “genuine reorientation” of Africa’s export towards the Asian Drivers, with falling importance of its traditional markets in the West.⁶

Figure 5

<table>
<thead>
<tr>
<th>Region</th>
<th>1991-2003 Average Growth Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>E.U.</td>
<td>5.3%</td>
</tr>
<tr>
<td>U.S.</td>
<td>6.1%</td>
</tr>
<tr>
<td>Asia</td>
<td>10.3%</td>
</tr>
<tr>
<td>Africa</td>
<td>7.0%</td>
</tr>
<tr>
<td>Overall</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Source: World Bank Group, Africa Region, Private Sector Unit, Summary of Patterns of Africa-Asia Trade and Investment, Note Number 1, September 2005

China, for a variety of reasons, catches the eye when looking at Africa-Asia trends over the last five years. Although in 2004 only 2% of Chinese trade was with Africa, the continent has done particularly well as China opened up to the world, with Africa-China bilateral trade growing more than 700% between 1991 and 2002. Since the first China-Africa Forum in Beijing in 2000, bilateral trade has grown to more than $20bn over the four years to the end of 2004. Chinese imports from Africa concentrate on primary commodities; extractive mining and forestry in particular make up the bulk of African exports to China. The picture in India is very different: India’s share in Sub-Saharan Africa’s exports has actually fallen and remains at low levels of 2%. Apart from crude oil, metals and woods, the other significant Chinese imports from Africa are cotton from Cameroon and

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Tanzania; cocoa, synthetic spinning fiber and wool from Ghana; and alcohol from South Africa.\(^7\)

Although China’s thirst for African oil (especially from Nigeria, Sudan and Angola) is well-reported, it has to be mentioned that the 674 Chinese state companies involved in Africa have also invested in booming sectors such as copper mines, fishing, construction and telecommunications. In 2004, Chinese investments represented $900m of the $15bn of FDI in Africa.\(^8\)

Kaplinsky et al point out that there is a danger of overestimating the historic and present impact, and underestimating the potential future impact of China’s rise on Sub-Saharan Africa. By creating a synthetic framework distinguishing three primary channels of transmission – trade, FDI, and aid – Kaplinsky allows us to focus on the “complementary-competitive” dimensions as well as on the direct and indirect impacts. This primary focus of this paper is on trade links.\(^9\)

Table 1: Kaplinsky’s Synthetic View of the China-Africa Trade Channel

<table>
<thead>
<tr>
<th>Trade</th>
<th>Direct</th>
<th>Indirect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complementary</td>
<td>-inputs for industries</td>
<td>-higher global prices for SSA exports</td>
</tr>
<tr>
<td></td>
<td>-cheap consumer goods</td>
<td></td>
</tr>
<tr>
<td>Competitive</td>
<td>-displacement of existing and potential local producers by cheaper Chinese producers</td>
<td>-Competition in external markets – falling prices and falling market shares</td>
</tr>
</tbody>
</table>


Table 1 above sums up the threats and opportunities facing Africa caused by this growing Asian interest. On the one hand, there are direct and indirect ‘complementary’ effects of Africa-Asia trade, which should be seen as opportunities. But on the other hand, there are direct and indirect ‘competitive’ effects which might threaten Africa’s future economic development.

B. Threats

It is useful to keep in mind that China has predominantly imported only a limited number of products – mostly oil, minerals and precious metals – and that from a small number of Sub-Saharan countries. In return, it primarily exports

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\(^7\) Ibid. and UN Comtrade Database, UN Statistics Division, 2006 – own calculations


manufactured goods, most of them final consumption goods.\(^{10}\) This is, of course, not an unfamiliar story in international development and represents a particular threat to Africa’s nascent manufacturing sector. The outlook is not entirely bleak although there is considerable evidence that domestic manufacturers in some African countries are being squeezed by China-sourced imports, especially in the clothing and furniture sectors. Also, although there is no doubt that a boom in commodity prices could favor certain Sub-Saharan economies; it also poses severe problems of economic management: if poorly handled, it could easily become a “resource-curse.”\(^{11}\) Outside of clothing and textiles, there seems to be little trade between China and Sub-Saharan Africa in intermediate goods, let alone clear signs of major cooperation in coordinated global value chains.

C. Opportunities

The opportunity for Sub-Saharan African countries from a mounting Chinese commercial interest is an area well-worth examining. Both China and India have seen a growing middle class over the last decade with increasing purchasing power, and an avid appetite for imported goods. This means that China and India are not just big potential markets for African goods. Compared to the United States, Japan and the European Union, China is a much more open economy than Africa’s traditional markets in the West. Imports into China as a percentage of GDP constitute more than 25%, while the equivalent ratio for the U.S., the E.U. and Japan is but 15%, 14% and 11% respectively.\(^{12}\) Furthermore, Chinese and Indian trade involvement in Africa also creates the possibility of ‘spillovers’ through the attraction of foreign direct investment in infrastructure, and through technology and skills transfers.

The central concern for Sub-Saharan Africa is whether they can successfully leverage this new-found bargaining power in order to be a more pro-active player in global network trade. First and foremost, Sub-Saharan Africa needs to start by getting its own house in order – i.e. the policies, institutions and trade-enabling physical infrastructure that will be the critical foundations for any future export-oriented economic growth. There already is plenty of anecdotal evidence of Chinese direct investment in roads and transport infrastructure as well as power generation.\(^ {13}\) Chinese firms are also setting up plants in Africa (especially in apparel) in order to circumvent restrictive quota regimes and enjoy free market access to the European Union via Cotonou and the United States via AGOA (one good example is Lesotho). Another favorable aspect of South-South investment is that developing countries tend to be less risk averse and more willing to deal with

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10 Africa’s top 10 exports are crude oil (37%), diamonds (6%), platinum (3%), gold (2%), coal (2%), cocoa beans (2%), motor cars (2%), ferro-alloys (1.5%), aluminum (1.3%) and cotton (1.2%). Africa’s top 10 imports are ships and boats (4%), passenger motor cars (3.5%), motor vehicle parts (2.4%), medicaments (2.3%), crude oil (2%), radio transmitters (1.4%), cotton fabrics (1.3%), rice (1.2%), wheat (1.1%) and electric appliances (0.9%).
13 Hilsum, “We Love China,” Granta, p. 1-6
the informal governance arrangements and processes found in many African countries. Arguably, they may even be more likely to press for improved governance and infrastructure to lower their own risk, compared to investors from industrialized countries, who would probably choose not to enter the market at all.\textsuperscript{14}

The Kenyan cut flower industry offers one promising example for future Africa-Asia cooperation. Traditionally, the majority of Kenyan cut flowers are exported to the Netherlands, where they are sold in auction houses and are then re-exported to large markets in the United States or Japan. This rather convoluted process contributes to a much shorter vase life of Kenyan flowers. An emergent trend in the industry is direct sales to supermarket chains, which seem keen to cut out the auction houses and buy directly from flower farms abroad. The African producers really are the main beneficiary of this new trend. For supermarkets, African flowers are attractive because they are inexpensive and their growers are willing to accept a fixed price. To the African growers the arrangement is beneficial as well because supermarkets buy large quantities at fixed prices.\textsuperscript{15} The commercial challenge for Kenya is to “cut out the Dutch middleman” and sell directly in Japan’s more than $10bn flower market. This Kenyan example could perhaps even be expanded to the whole horticultural sector in Africa, promoting direct sales of fresh fruit and vegetables to Asian (and European) supermarkets.

A second concrete opportunity for Africa-Asia cooperation is tourism. With rising middle classes in China and India looking to spend a significant part of their increasing disposable incomes on holidays, there is clear potential for Africa to reap the benefit. Through positioning itself as a relatively close and attractive holiday destination, the gain for Sub-Saharan Africa could not just be direct (in tourism services, hotels, restaurants, etc.) but also indirect: the fact that more and more direct flights arrive in African airports makes transport cheaper and Asian markets more readily accessible for African goods. One clear case of a potential tourism winner is Mozambique, which has far from attained its tourism potential and will be discussed more in detail below.

However, all of the factors that would make Sub-Saharan African exports competitive in Europe or the United States – especially price, speed-to-market, labor productivity, flexibility, and product quality – are equally if not more important in the fiercely competitive Asian markets. In the next section, we will address these “critical factors” in more detail and underline their importance given the changing nature of international trade and the emergence of global production networks as the dominant source of international trade.


3. The Changing Structure of International Trade: From Comparative Advantage to Global Trade Networks

The rise in trade in intermediate goods in manufacturing constitutes a fundamental shift in the structure of international trade and poses a challenge to classical economists’ understanding of how countries fit into the international division of labor. In the traditional theory of international trade, the direction of trade (i.e. which countries produce what goods for export) is determined by the principle of comparative advantage. According to this principle, countries will specialize in the production and export of the good or goods for which its relative productivity advantage exceeds that of the foreign country.16

A radically different notion of comparative advantage emerges if we focus more generally on the changes in the structure of international trade over the last 20 years; in particular the rise in intermediate goods in overall international trade, whether it is done within firms as a result of FDI or through arm’s length subcontracting.17 Such intermediate goods trade has risen more rapidly than trade in final goods, and it is the defining manifestation of globalized production, or what has variously been termed “outsourcing”; the “international disintegration of production” (Feenstra, 1998), “the slicing up of the value chain” (Krugman, 1995), “global production sharing” (Yeats, 2001), “the international integration of production” (UNCTAD, 1993), and the “rise of global production networks” (Ernst et al, 2002), or “global value chains” (Sturgeon, 2001).18

In order to take advantage of globalization, and foster economic growth through international trade (Dollar & Kraay, 2001), it is essential for countries to have access to or be integrated in international production networks. In spite of the many opportunities offered by globalization, Sub-Saharan African countries, with the only exception of South Africa, do not figure prominently – if at all – in these global production networks. In order to get a better understanding of where exactly the opportunities for Africa lie, it is helpful to analyze country-level industry value chains and compare industry performance with their direct international competitors.

Through the multiple value chain studies that have been conducted on several sectors/industries, we have identified five “critical factors” which determine the success of a country’s industry in reaping the benefits from global network trade: price, speed-to-market, labor productivity, flexibility, and product quality.

17 Robert Feenstra, “Integration of Trade and Disintegration of Production,” Journal of Economic Perspectives, Fall 1998
**Price.** The first and core critical factor is rather obvious. Figure 6 below compares the price of a T-shirt in four countries. It is no surprise that China has a clear competitive advantage, while lowering the price of its goods is one of the main challenges for Africa (the price in Kenya is more than three times the price in China).

![Figure 6: Price of a T-Shirt](image)


**Speed-to-Market.** Especially land-locked African countries are at a huge disadvantage here; although the African continent as a whole suffers with regards to this indicator, especially when we look at supplying the U.S. market (where there is fierce competition from Central America & Asia) and the European market (strong competition from Eastern Europe & countries from the former Soviet Union, but increasingly also Asia). Since growing value is being placed on fast order-to-delivery cycles, trade-related institutions and physical infrastructure are of crucial importance to be able to compete successfully in global markets. This is illustrated in figures 7 and 8 below, which compares the time it takes to import and export goods into various African countries and its competitors.

![Figures 7 & 8](image)

-**Labor Productivity.** A combination of poor education (both in terms of quality and overall coverage), deficient training, weak skills and a lack of entrepreneurial incentives puts Africa at a huge disadvantage compared to the rest of the world (figure 9). In addition to low investment in human capital, many African countries have difficulty retaining highly educated workers or attracting skilled expatriates.

![Figure 9: Value Added per Worker in Medium-Sized Firm (in US$)](image)


-**Flexibility.** Firms need to be responsive to the buyer’s ever-changing needs and be able to deliver accordingly (be it small or large orders) as well as in a timely manner. Apart from South Africa and Mauritius, which produce high value-added products, most Sub-Saharan African countries’ manufactured exports are basic products that are vulnerable to lower-cost Asian production in general. It is hard to pin down a specific indicator that can measure flexibility. One possible way is through surveys with the buyers, asking them for a detailed assessment of their producer’s performance. Flexibility could be broken down into “coping with small orders” and “coping with changes in large orders.” In general, Africa performs rather poor compared to its competitors from Asia and Latin America.

-**Product Quality.** A good indicator of product quality is the “defect rate” or the percentage of items returned by the buyer. Unfortunately, reliable data on these indicators are also scarce and rather incoherent. However, from the detailed value chain studies, we find that the defect rate in the Kenyan apparel industry is over

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20 Hubert Schmitz and Peter Knorringa, “Learning from Global Buyers,” *IDS, University of Sussex*, 2001
3% compared to Honduras where it is less than 1%. Since the quality of the final product is also directly influenced by raw materials and inputs used in production, we could look at the quality of “purchased inputs that is of lower than agreed upon quality” as an indicator of overall quality. Figure 10 shows that this indicator is much higher for firms in Ethiopia, Tanzania and Uganda compared to South Africa, India and China. It is also interesting to note that this issue is more serious for export-oriented firms in these countries, compared to the firms which mainly produce for domestic markets.

![Figure 10: Quality Reputation (% of purchased products that is of lower than agreed upon quality)](image)


4. Value Chain Analyses

The above-mentioned competitive factors are driven not only by industry-level efficiency but are directly affected by underlying government policies, institutions and physical infrastructure in the exporting countries (such as a trade facilitating environment, quality control systems, licensing). Value chain analyses can shed some light and provide clear insights on where the opportunities for Africa lie. Trade-enabling policies and regulations need to be addressed directly by the government in a comprehensive, coherent and integrated manner.

While many firms have had international operations and trading relationships for decades, in recent years we have seen the formation of global-scale economic systems which are tightly integrated and often managed on a day-to-day basis. It is therefore hard to imagine that today’s process of economic development could be isolated from these global production systems.

Gereffi (1999) makes a distinction between buyer-driven and producer-driven global supply chains. The former denotes the case of global buyers creating a supply base upon which production and distribution systems are built without

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21 World Bank Group, Value Chain Studies of Honduras and Kenya, 2005
direct ownership. Most common examples are apparel (e.g. Wal-Mart), furniture (e.g. Ikea) and footwear (e.g. Nike); i.e. labor intensive consumer goods. In producer-driven chains, manufacturers of higher technology products like automobiles and computers are the key economic agents that control relations with suppliers of intermediate components, and forward links with distribution and retailing services. The lead firms in producer-driven chains usually belong to large international oligopolies.

Before focusing on these “networks” however, we will first focus on primary commodities (by far Africa’s greatest source of foreign currency revenue through trade). Afterwards, we will consider specific cases of buyer-driven and producer-driven supply chains, ending with one specific case of services network chains: the tourism industry. For each of these value chain analyses, this paper will try to emphasize the public policies that were either lacking or instrumental in the performance of the various industries. After all, in some sectors, certain steps that were or were not taken by the government have been decisive in determining a sector’s relative competitive success or weakness.

A. Primary Commodities: Ghana (pineapple), Kenya (flowers) and Nigeria (shrimp)

a. Ghana: Pineapple

Pineapple exports are currently leading the horticultural sector in Ghana. Commercial cultivation of pineapple for export is a relatively recent phenomenon in the West-African country; it only really took off with the introduction of sea-freighting in the mid-1990s. Prior to 1995, nearly all exported pineapples were transported by airfreight. With the creation of the exporters’ association SPEG – ‘Sea-freight Pineapple Exporters of Ghana’ – sea freighting of pineapples in reefer vessels for exports to the European market steadily grew in importance. In 1995 a mere 2700 tons were shipped, whilst in 2004 a total of 48,000 tons of pineapple were freighted by sea from Ghana to Europe.\(^{23}\) In the same period the volume of airfreight pineapple was reduced from well over 10,000 tons in 1995 and 1996 to around 6,000 tons in 2002.

The fresh pineapple production sector comprises thousands of small-scale farmers and several large-scale plantation growers. Even though there are several active associations, the pineapple sub-sector is still not sufficiently organized and streamlined to achieve sufficient volume of production, thereby enjoying the benefits of economies of scale and increased negotiation power. The pineapple sub-sector in Ghana will not be able to capitalize on the market opportunities in Europe if the following interrelated issues are not addressed: low quality, low volume of product, high shipping costs. Especially the last factor makes it difficult

\(^{23}\) Source: SPEG 2005
to compete with Costa Rica and Cote d’Ivoire, the two major players in the European market.

The adjacent graph provides an overview of the cost structure for Ghanaian fresh pineapple freighted by sea and by air compared to fresh pineapples from its main competitors Costa Rica and Cote d’Ivoire. In this graph the CIF prices per unit of product from the various countries subdivided for the various cost factors are compared.

It is immediately clear that the sea freight costs are much higher in Ghana than in the two other countries, thus contributing to its fragile market position in the European Union, which is primarily based on low cost for low quality.

![Figure 11: Pineapple Value Chain Analysis](image)

Source: Frank Joosten, Agribusiness VCA Ghana

The two primary objectives for the Ghanaian pineapple export sector to be more competitive should focus on **Price** and **Product Quality**. Measures that would lead to (1) increased production volume would reduce prices through economies of scale and (2) enhanced standards would lead to higher product quality and bigger profit margins. Elements of international “cost leadership” are achieved in the pineapple supply chain by a combination of qualitative improvement (higher standards through accreditation, ISO9001 and HACCP) and standardization of steps and procedures within the chain.

Given the increasing emphasis of European importers on safety and quality assurance systems there is a growing need for technical support and inspection services among exporting businesses. These services are currently available in Ghana from international service providers which are accredited, but are expensive under Ghanaian conditions. Local business service providers that can instruct and certify agri-food companies for the establishment of for example HACCP-systems, EurepGAP, BRC, etc. are not available. The possibilities of introducing a general quality standard for exportable fresh produce from Ghana (“Ghana GAP”?) that is recognized by Eurep and several of the other main

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systems in Europe are currently explored by a working group of GSB and the National Horticultural Taskforce. Development, recognition and sector-wide establishment of such quality systems is, however, likely to take several years.

b. Kenya: Cut Flowers

The cut flower industry has overtaken coffee and tourism as a source of foreign exchange for Kenya and now ranks second only to tea, according to the Kenya Flower Council. Over the years, Kenya has become the European Union’s biggest source of fresh flower imports and has overtaken Israel as the market leader. It has a 25% market share, beating Colombia and Israel which have to be content with each 16%. Two-thirds of the Kenyan blooms go to the Netherlands, which dominates the trade in cut flowers worldwide through its auction halls where Dutch wholesalers buy flowers for re-export to markets as far away as the United States and Japan.

In Kenya, increased air travel for tourism reduced the cost of airfreight to Europe and provided new transport opportunities for small quantities of fresh products. Tourism also increased local demand for high quality fruit and vegetables and provided an outlet for produce not meeting export standards. A key success factor is the involvement of a variety of private institutions and marketing arrangements that allow for fast, flexible and reliable delivery of cut flowers to the foreign market. This success is even more remarkable given the relatively high air freight rate to Europe from Kenya ($1.60/kg), compared to direct competitor Israel ($0.75/kg).

One of the problems in the flower sector is that medium-scale exporters sell 100% of their consignment through the (mainly Dutch) auction system. As competition becomes increasingly stringent, support is required to identify and form linkages for medium-scale rose exporters to gain effective access into the direct sales market. One clear trend is the sales of cut flowers through supermarkets. The successful entry of Kenyan cut flowers in the UK market is principally due to the fact that exporters are selling directly to supermarkets in pre-packs with ready labels and guaranteed vase life. In this new market segment, stringent quality control, packaging, labeling, and resources dedicated to marketing and client relations are a must.

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A critical point is that Kenyan exports – which are 2-5 days old – must compete directly with local and regional producers at the auction house. From there, it then has to be redistributed to various points of sales, which taxes the vase life of a flower. Consequently, to avoid the few extra days in getting cut flowers to a consumer, direct sales could drastically reduce the “farm-to-vase” time. Unlike African and Israeli exporters, producers in Latin America have already taken a direct sales approach rather than relying on the auction system. In this context, Latin American exporters seek out firms with distribution channels that reach both wholesale and retail markets. This strategy allows farmers to know the market price prior to delivery, assuming that they guarantee high quality.

Kenyan cut flowers are overrepresented at the Dutch auction. As a result, this is having a gradual displacement effect on medium-scale exporters. This should be an impetus for Kenyan exporters to consider non-traditional markets in Asia. While the marketing strategy for Asian markets will differ, targeting niche markets in this region needs to be explored more aggressively. Especially if the Japanese market is strong and growing, there are clear benefits to be able to ship directly from Kenya instead of going via the auction houses in Amsterdam. As already mentioned earlier, the growing interest of supermarkets to buy directly from African growers is a clear opportunity to ‘cut out the middle man’ and directly supply the Japanese market.

Unfortunately, the success of the Kenyan cut flower industry is mostly caused by large-scale growers and overshadows the often struggling small and medium-sized producers who face a number of constraints where simple government measures could make a major difference. Small growers lack information about the latest growing methods, have poor equipment, use uneven quality of agrochemicals and face a shortage of surveillance and quality monitoring. Furthermore, the VAT rebate system is very inefficient: it is well known that 100% of flowers are exported, but at the same time, all growers must pay VAT on their input materials and afterwards submit a claim for a rebate, which usually has a cycle of 6 to 12 months to be paid back. As a result of that long VAT repayment cycle, there has been a dramatic reduction in small growers’ re-investment in their physical facilities, which has gradually reduced the turnover of their production facilities. Given the absence of adequate financing, this is probably likely to force small and medium-sized growers into lower value-added flower production.
c. Nigeria: Shrimp

In many respects, the Nigerian shrimp industry is a success story. Once a declining industry (about ten years ago), it is now an industry with a promising outlook and boasting a significant growth potential. Nigeria’s shrimp industry has been able to turn the tables because it has met international standards of quality and health safety, cultivated and captured a segment of the international market, built port-side facilities for its own use, provided high value added activities, and achieved profitability in spite of a high interest rate environment. The industry is confident about its future market opportunities and seems ready to expand the trawler fleet.

![Figure 12: Shrimp Value Added and Shipment Value Breakdown in Nigeria](image)

Source: Nigeria Value Chain Analysis, 2005

Looking at figure 12, we can make the following observations:
- Fuel is a key cost driver at 36% of value added because it is used for vessel operation in the trawling activity;
- Administrative overhead costs are significant relative to other value adding inputs but consistent with local practice. Relative to labor cost, the figure reveals vividly the importance devoted to management and the level of effort spent in overseeing operations;
- Capital charge is also a large cost driver, but one that is fully recovered;
- Although logistics account for only 5% of the value adding inputs, an efficient cooling chain is essential for perishable exports.

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28 The Nigeria Value Chain project was jointly managed by Uma Subramanian (FIAS, World Bank Group) and Peter Mousley (Africa Region, The World Bank).
The value added component of the shrimp chain provides ample room to cover both the primary input costs as well as the logistics costs. The profit rate is 18% of value added. This “success” is a turnaround for a previously declining industry and promises to be a major source of job creation and future export earnings.29

Two major factors in this positive result include the nature of the product – high value shrimp – as well as the production of quality goods – shrimp that meets international quality standards as determined by HACCP. The latter has enabled Nigerian shrimp producers to access high end European markets which are willing to pay premium prices for high quality goods, allowing them to meet the high costs of doing business yet make a decent profit.

In essence, a shift to higher value products and higher quality goods has provided the Nigerian fish industry a chance to expand and provide positive returns. However, the industry is concerned with the long-term sustainability of the stock of wild shrimp, as the natural growth of wild stock is not anticipated to keep pace with the rate of harvesting. Regulatory controls will protect the stock but not likely help to increase the stock. Wild shrimp supply will act as the constraint to industry growth, unless alternative sources of harvesting are found. To this end, the industry may want to diversify. A promising alternative option may be farmed shrimp as a means of sustaining industry growth, a feasibility that is being contemplated by some of the trawling companies such as Atlantic Shrimpers.

The Nigerian government has been influential in fostering growth in its national shrimp industry. The key factor for Nigeria has been to acquire the HAACP certificate that has opened up the European market. Thanks to the right policy implementation, Nigeria was included in the E.U. “Decision 2001/635/EC - Part 1” list of countries in 2001; under this arrangement, the Federal Department of Fisheries of Nigeria was designated the Competent Authority or central point of responsibility. It is hard to imagine that the Nigerian shrimp industry would have been able to reverse its fate without E.U. market access. Furthermore, since demand for shrimp shows a clear growing trend and has a relatively straightforward value chain, it allowed for relatively easy integration of Nigerian shrimp production into the global value chain.

B. Buyer-Driven Supply Chains: Textile/Apparel Chains in Kenya & Lesotho

a. Kenya: Apparel

The performance of the Kenyan garment sector is highly dependent on exports to the United States under the AGOA agreement. The high levels of dependence on specific markets combined with an equally high dependence on imported material

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makes the industry vulnerable to market fluctuations and disruptions. Very little evidence exists to suggest that the government and garment manufacturers are actively pursuing dialogue to develop an industrial strategy and vision to help diversify the market demand base, as well as a strategy to strengthen the entire cotton-to-garment supply chain.

The lack of planning associated with market liberalization of the textile and garment sector in 1991 and its repercussions are reflected in the displacement of workers from the entire cotton-to-garment chain, and the consequent increase in the number of small and micro garment manufacturers, influx of under-declared fabric, dominance of second-hand garments in the economy, and the large number of people whose welfare is dependent on the growth of the second hand garment market. The weak position taken by the government to formulate a strategy to curtail the influx of second hand garment imports, while at the same time creating alternative employment opportunities in the formal garment manufacturing sector is dampening the potential growth of the entire cotton-to-garment industry in Kenya. This problem is reflected in the continued use of labor intensive production methods among domestic market oriented garment manufacturers, as well as the lack of new investments in rehabilitation activities in the sector.

At the factory level, high rejection rates suggest the need for introducing and integrating modern management practices such as world class manufacturing methods and standard operating procedures. Low labor productivity could indicate (a) need for in-factory training, as well as weaknesses in the institutional support infrastructure to help enhance labor performance (b) distortions in labor policy such as rigidities in hiring and firing that could manifest itself in labor productivity measures. An apparel value chain comparison between Kenya and Honduras highlights many of the competitive challenges Kenya is facing (figure 13) that are both policy based and market based.
At US $3.60, the FOB price of a plain cotton t-shirt from Kenya is over 2.5 times the FOB price of a similar t-shirt from Honduras. What explains the difference in FOB price offered by firms in the two countries? As highlighted in Figure 13, let us examine three elements that are much higher in Kenya than in Honduras. Raw material costs, mostly imported fabric, for Kenya are almost 3 times that in Honduras. Both Kenya and Honduras are subject to trade agreements with the US – AGOA and CAFTA respectively. Apart from Kenya’s location that increases ocean freight costs, there are two other underlying issues that are not insignificant in explaining the difference: (i) trade logistics costs for imports at $2325/TEU in Kenya is 3.5 times that of Honduras; (ii) tariff in Kenya on imported fabric at 17.5% compared to 9.5% in Honduras. For a labor intensive sector such as apparel, would Kenya not have some comparative advantage given that Kenyan wages (at $9.40/labor day) on average are much lower than in Honduras ($12/labor day)? However, in monetary terms the labor cost for a t-shirt in Kenya is still higher than Honduras. This is really driven by lower labor productivity. On an average, Honduran firms produce twice as many shirts as Kenyan firms holding all other factors constant. Finally, outbound logistics costs (excluding ocean transportation costs) in Kenya are almost 4 times that in Honduras. The
cost difference is further exacerbated by the quality of product as reflected in reject rates of >3% shows Kenyan firm’s performance. The example discussed here clearly illustrates that geography alone is not driving Kenyan apparel industry’s lower competitiveness in US markets; nor is lower labor costs compensating for other overriding constraints.

b. Lesotho: Apparel

The signing of AGOA has resulted in rapid growth of the textile and apparel industry in Lesotho. The growth rate has been helped by the entry of Asian firms, to the point where the sector now contributes a huge share of overall output. What we are witnessing now is a process of growth led infrastructure as Chinese and Taiwanese investors demand improved infrastructure in transport, energy and water, all necessary for profitable operations in the sector. As a result, the government is beginning to address these issues with the help of donors.31

The textile and garments sector in Lesotho faces a double challenge: overcoming increased competition after the phasing out of the MFA in 2005, and dealing with the scheduled 2007 expiration of the special dispensation provision in AGOA. Right now, Lesotho is able to sell duty-free in the American market while at the same time buying cheap fabric from Asia. It is not clear if the sector will be able to survive past the 2007 expiration.32 It is also not sure what will happen to the Taiwanese investors when they are no longer able to reap the benefits of the current arrangement.

![Figure 14: Value Added of African Textile Exports to the U.S. under AGOA](image)


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31 Stephen Gelb, “South-South Investment,” p. 204
Lesotho is by far the only country that exports almost 100% of its apparel to the U.S. under AGOA terms. But, as figure 14 above illustrates, exports from Mauritius – when measured in dollar value per square meter equivalent – are nearly 43% higher. Specifically, value per square meter equivalent for Lesotho is approximately $3.79, while for Mauritius, it is $5.41, and for Madagascar, $4.08.

One advantage Lesotho currently has over many African countries is that it is one of the least developed countries in Africa with the highest labor standards. The reason for that is the close relationship Lesotho has developed with big international buyers (such as GAP and Levi’s) who require all their suppliers to comply with social and environmental standards in their codes of conduct. The Government of Lesotho is collaborating with the ILO on labor law reform and should take advantage of this collaboration by marketing Lesotho to the rest of the world as an international centre for socially responsible labor. The question is, however, if that alone will suffice for the industry as a whole to survive.

C. Producer-Driven Supply Chains: Automotive Parts in South Africa

Just like many formerly inward-oriented economies, South Africa’s industry started to face a radically new competitive environment as its trade barriers began to fall starting in the late 1980s. The initial result of this reform in trade policy was a sharp increase in the trade deficit in the automobile and components sector of South Africa. In 1995, the South African government’s Motor Industry Development Program (MIDP) heralded a much-lauded shift in vision and aims. Its main objective was to improve the international competitiveness of firms in the industry, enhance growth through exports, and stabilize employment levels. In order to achieve these aims, a series of export-oriented incentives were introduced, coupled with a reduction in import tariffs between 1995 and 2002.

Since the implementation of the MIDP, South Africa has seen rapid growth in the auto sector, based on a speedy rise in the exports of completely-built-up units (CBUs), especially after 1998. In addition to exports of CBUs, there was also a marked increase in the exports of direct car components.

With respect to CBU exports, three German assemblers sourced large numbers of cars from South Africa to their global markets. BMW decided to specialize on the 3-series car in order to obtain scale economies, and displaced local production of the 5- and 7-series with imports. Its exports of CBUs increased steadily from

33 Source: Africa Coalition for Trade, Inc.
34 Ibid.
36 For the specifics on those export incentives, see Barnes, Kaplinsky and Morris, Industrial Policy in Developing Economies: Developing Dynamic Comparative Advantage in the South African Automobile Sector, May 2003
4,346 units in 1998 to 43,583 units in 2002. Its exports were destined for the North American, Australasian, European and Japanese markets. Volkswagen sourced an increasing number of Golf 4 cars for the UK and European markets, with these exports growing from 10,485 units in 1998 to 30,533 units in 2002. Daimler-Chrysler exported 36,324 C-Series Mercedes Benz’s to Japan, the UK and Australasia in 2002, a 20-fold increase on exports of only 1,752 vehicles in 1998. Also, Toyota began exporting the Toyota Corolla to Australia and New Zealand in April 2003.

Component exports have also grown, particularly that of catalytic converters (48 percent of total component exports in 2001) and leather seats (13 percent of the total). A major conduit for these exports were the non-German OEMs (original equipment manufacturers) who satisfied their need for duty credits by purchasing these from component suppliers, many of whom they eased into export market niches. Catalytic converters are an especially interesting case, since initially the level of value added was low. However, as scale built up, investment of more than 2 billion rand (more than $200 million) were made into a deepening of the production process. In 2002, South Africa supplied 12 percent of the global catalytic converter market and was the most important supplier of catalytic converters to the European Union.

What clearly drives South Africa’s relative success in the automotive industry is a supportive trade policy environment. Additionally South Africa is by far the highest performer Sub-Saharan Africa with regards to several factors — especially labor productivity, speed-to-market, product quality, and flexibility.

**D. Services Supply Chains: Tourism in Mozambique**

Tourism is an industry which potentially could have a myriad of spillover effects for Sub-Saharan countries: transportation, enhanced infrastructure, transfers of technology, knowledge, and skills. As fast growth rates in the Chinese and Indian economies foster the creation of a growing Asian middle class, the opportunity for Africa in attracting tourists from that part of the world becomes greater.

Mozambique is an interesting case, with underdeveloped potential. Since the 1980s, the Government of Mozambique (GOM) has implemented many ‘first generation’ structural reforms such as adopting sound fiscal and monetary policies, privatizing public enterprises and liberalizing trade. The reforms have helped stabilize macroeconomic balances and supported the remarkable growth performance since 1992. In 2000, the GOM adopted the Action Plan for Reduction of Absolute Poverty (PARPA) as a medium-term rolling instrument incorporated into the public planning system. Tourism is seen as a priority area in which additional investment may create the jobs that are necessary to meet the PARPA objectives. This expectation is sensible and reasonable, as most
developing countries have increased market shares in international tourism. Sub-Saharan Africa, in particular, has experienced very strong growth in tourism within the last two decades – increasing its market share of global arrivals from 1.5% in 1970 to 4.5% by 2003.37

Despite a strong tourism asset base and its geographic proximity to South Africa, one of the world’s top destinations, Mozambique still trails behind all its neighbors except for Malawi. Despite quite an impressive annual growth rate of 13% (1999-2003), the average number of tourists per 100 inhabitants, at 2 for Mozambique is half of that of Africa’s average, and well below the world average of 11 per 100 inhabitants. Mozambique’s poor performance reflects problems with the country’s overall image, product variety and quality of tourists’ experiences. Realizing this potential depends substantially on the ability of all players in the Mozambique tourism value chain – from air service providers, to frontier agencies (e.g. for immigration and visas), hotels, tourism service providers, to other suppliers and government officials – to create and deliver high-quality tourism experiences that can transform the country into a “must see” destination in Africa.

Figure 15: Price Ranges of Tours for Competing Destinations in the Portuguese Market

Figure 15 illustrates Mozambique’s shortcomings. On the one hand, the country cannot compete with Brazil, Egypt, Cape Verde and Tunisia in the “low budget” market segment. And on the other hand, for “higher budget” travelers, it still cannot charge the premiums Mauritius and the Seychelles can charge.

The requirements in turning Mozambique into a regional star for tourism are extremely high. First of all, the country needs to address its visa regulations. Many countries in its region don’t require visas at all from EU citizens (Mauritius, 37 FIAS and OECD (2006), “The Tourism Sector in Mozambique: A Value Chain Analysis,” World Bank Group.)
Seychelles, and Maldives). There are also limited intercontinental flights from Europe and significant delays and hassles for tourists in airports. Second, there is weak presence of Mozambican tour operators in regional and global markets and limited collaboration between foreign and Mozambican tour operators. Third, there are no clear or concerted mechanisms to ensure the development and restoration of historic monuments and sites (e.g. Elephant reserve, Ilha da Mocambique, Ruins of the Bazaruto Fishing Pearls Company).

Several areas for government action can be identified. First of all, public investment in tourism development and marketing is small, especially when compared to competitors Kenya and South Africa. Furthermore, incentives for private investments in those areas are low given the inherent public goods nature of many tourism assets. Second, there is a weak presence of domestic tourism operators in the industry. Mozambique has 8 active tour operators compared to 50 in Uganda, 75 in Tanzania, and 220 in Kenya. Third, there is still limited coordination among the industry’s stakeholders. Airlines, hotels, tour operators, retailers, restaurants and a whole range of public sector agencies are not effectively working inter-sectorally to develop, promote and manage tourism destinations and more broadly, Mozambique’s image and positioning in world markets. Last, the roles and responsibilities among tourism related agencies will have to be clarified to avoid overlapping and efficiently allocate limited funds.

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38 Ibid.
5. Policy Implications

Although there are numerous caveats in emerging Asia’s growing interest in the Sub-Saharan Africa region, this paper has tried to focus on the opportunities for African countries to take advantage of the growing Asian giants in trying to leap into the global trade networks. It should be clear from the above analysis that a potential market in Asia does exist and will only grow in importance over the years to come. Over the last 15 years, Asia has already been Africa’s fastest growing export market, is much more open to trade than Europe and America, and there is no evidence to suggest that this trend will not continue in the near future.

The five market-related success factors that were identified for effectively participating in global network trade – price, speed-to-market, labor productivity, flexibility, and product quality – are highlighted in the value chain studies. The underlying policies are even more critical: efficient institutions and the right infrastructure will allow countries to actually experience the success factors or “outcomes.” It is vital for developing countries to get a supportive policy and institutional regime in place along with the appropriate infrastructure, in order to be able to improve these critical factors.

First of all, the example of Ghana’s pineapple industry illustrates the importance of product price in European markets. The only reason Ghana is even able to stay in the European pineapple market along competitors Costa Rica and Cote d’Ivoire is because of its significantly lower price, which it is forced to accept because of the lower quality of its product. However, Ghana faces a significant risk in this low price/low margin market unless it can ramp up quality as well as increase scale through appropriate policy support. On the other hand, Kenya’s apparel industry is in jeopardy because of its relatively high price compared to its major competitors from Asia and Central America. The high cost is driven mainly by raw material prices which are caused mainly by the “rule of origin” clause in the AGOA agreement.

The second critical factor, speed-to-market, is crucial in the success of the Kenyan cut flower industry. The fact that there are several planes leaving Nairobi every day for its main markets in the European Union not only makes for fast delivery – an obvious competitive advantage – but also its high responsiveness, which directly relates to flexibility (the fourth factor). Kenya was one of the first African countries to privatize its airline industry in 1996; and more recently, with the signing of the Air Services Agreement between China and Kenya, Kenya Airways has been granted landing rights in several cities in China, which also agreed to cooperate in areas of information and telecommunications. Kenya Airways is now operating direct flights to Hong Kong and Guangzhou in southern China from Nairobi. Since Kenya was granted the Preferred Tourist Destination Status in 2004, arrivals from China have more than doubled and are expected to
grow even further. Similar to the policies with China, Kenya could seek other markets in East Asia such as Japan and South Korea. While Kenya has pushed for reasonable progress in its airfreight, much remains to be done when it comes to land/ocean based freight. For a typical apparel shipment the order-to-delivery cycle is more than 30 days in Kenya compared to less than 15 days in Honduras (Figure 13). It takes 25 days to export a 20 foot container in comparison to 5 days for Hong Kong and 6 days for Malaysia. In addition to improving physical infrastructure, Kenya needs to improve trade institutions and procedures for smooth and low cost trade transactions and border transfers.

The third factor, labor productivity explains why South Africa is the only country in Sub-Saharan Africa to participate in producer-driven network trade. Combined with high labor productivity, the South African government introduced a series of export-oriented incentives, coupled with a reduction in import tariffs between 1995 and 2002 under the MIDP. Since its implementation, there has been rapid growth in the automobile sector, based on a speedy rise in the exports of completely-built-up units (CBUs), especially after 1998. In addition to exports of CBUs, there was also a marked increase in the exports of direct car components. On the other hand, labor productivity is a major weakness for the Kenyan apparel industry, especially when compared with Honduras. While Kenyan wages are lower than Honduras, labor cost for producing one T-shirt in Kenya is 1.6 times that of Honduras, due to much lower labor productivity. Clearly, in addition to shop floor productivity enhancement programs, implementation of specific policies to improve labor productivity ranging from education, skills training and health policies are important.

Finally, the last critical factor – product quality – underscores the rebirth of the Nigerian shrimp industry, which is making a profit thanks to the high quality of its exports to a growing European market. On the other hand, if Ghana wants to increase the profitability of its pineapple industry, it will have to start focusing on higher quality produce, through the implementation of standards and quality certification.

As a final note, and more as a potential area for future research, it is important to point out that African countries not only look to Asia as potential markets; they also look at the Asia as a “model” for economic growth and development. One continuing and highly controversial point of contention is the importance of industrial policy in East Asia’s growth story. There is no doubt that, in addition to trade and capital market liberalizing measures, the state has played a key role in East Asia’s economic development since the 1970s. Although it is impossible to point out one or two successful policies in East Asia, and keeping in mind that both continents are radically different, the question we have to ask ourselves is what lessons – if any – could African governments learn from East Asia’s state involvement in their miraculous growth and poverty reduction?

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39 Doing Business 2007
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