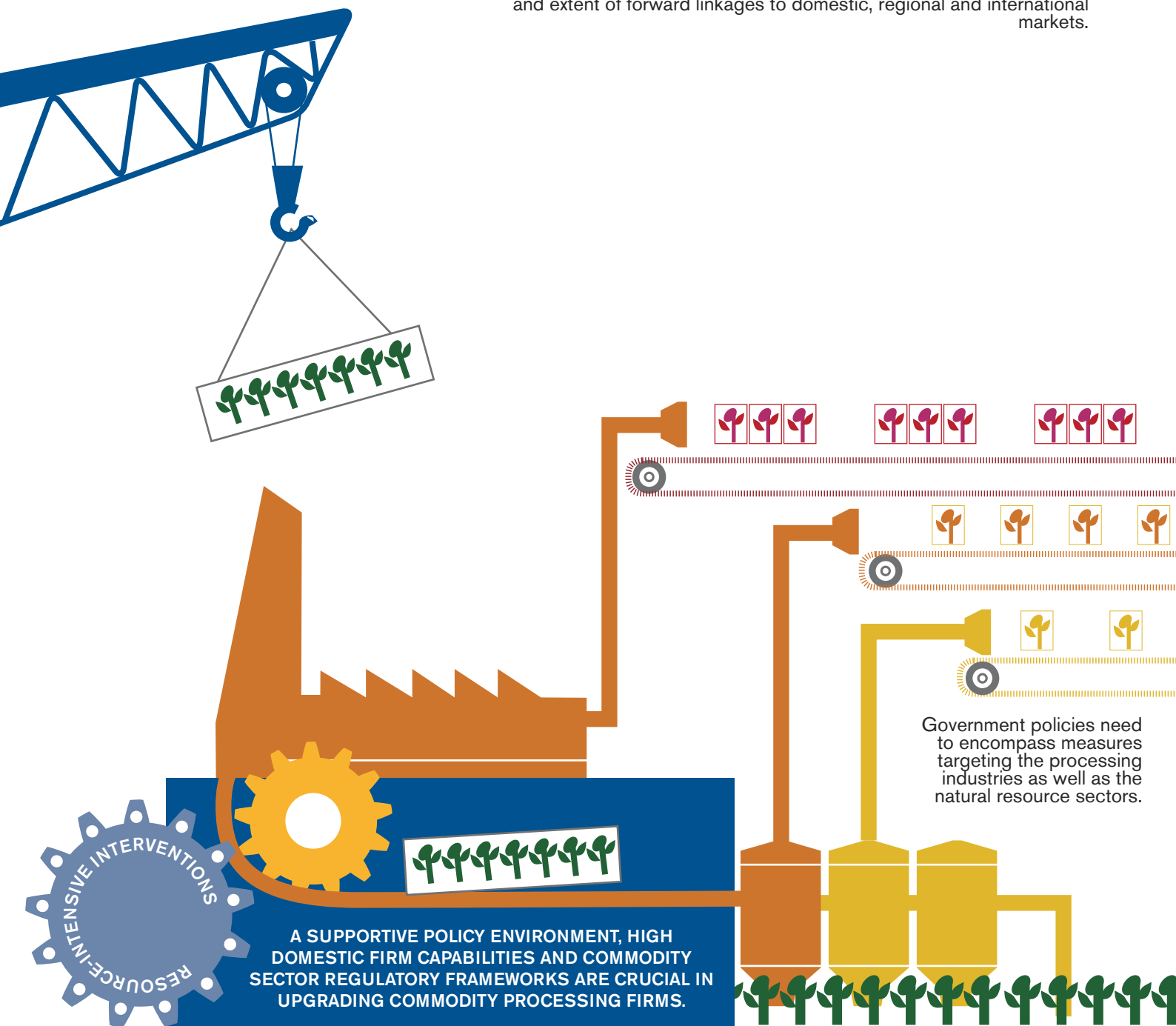

Making the Most of Linkages in Soft (Food) Commodities

PROCESSING PRIMARY SOFT COMMODITIES OPENS UP MAJOR POSSIBILITIES FOR VALUE ADDITION AND COMMODITY-BASED INDUSTRIALIZATION IN AFRICA. HOWEVER, IT REQUIRES LARGE AND RESOURCE-INTENSIVE INTERVENTIONS TO EXPAND AND UPGRADE AGRICULTURAL PRODUCTION.

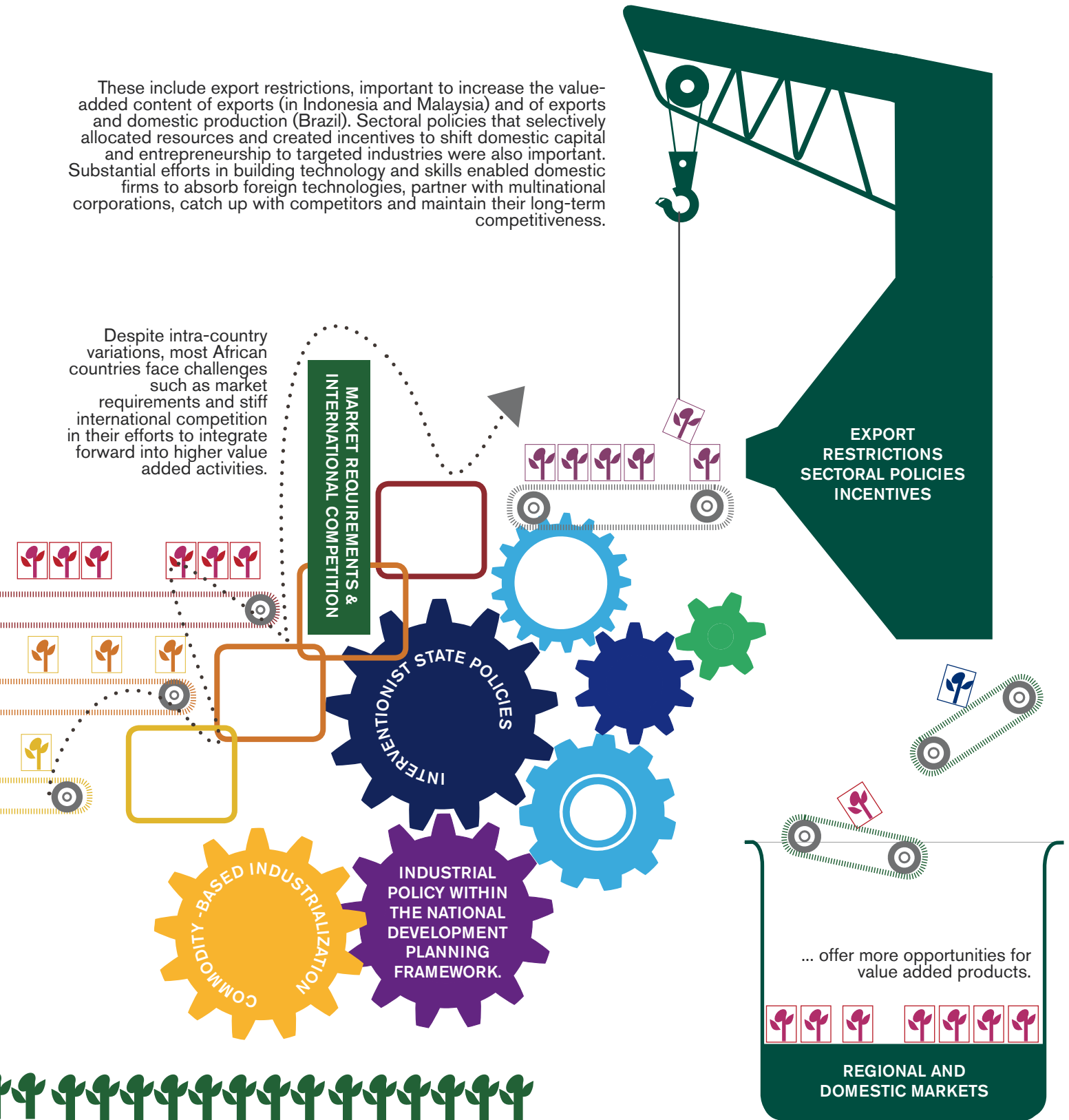
Agro-processing is one of the most developed manufacturing sectors in Africa. Most countries have agro-processing industries, although with significant variations among countries in size, international competitiveness, breadth of processing capabilities (range of products), depth of local value added, extent of backward linkages to agriculture, and extent of forward linkages to domestic, regional and international markets.



INTERVENTIONIST STATE POLICIES ARE CRUCIAL TO MAKE THE MOST OF SOFT COMMODITIES.

These include export restrictions, important to increase the value-added content of exports (in Indonesia and Malaysia) and of exports and domestic production (Brazil). Sectoral policies that selectively allocated resources and created incentives to shift domestic capital and entrepreneurship to targeted industries were also important. Substantial efforts in building technology and skills enabled domestic firms to absorb foreign technologies, partner with multinational corporations, catch up with competitors and maintain their long-term competitiveness.

Despite intra-country variations, most African countries face challenges such as market requirements and stiff international competition in their efforts to integrate forward into higher value added activities.



This chapter focuses on the extent to which Africa is making the most of linkages in soft commodities to drive a new process of industrialization. Through case studies, it deals with forward linkages (semi-processing, processing and marketing) and backward linkages (to farmer suppliers) along global value chains (GVCs) in four soft-commodity sectors (cocoa, coffee, tea and agro-products) with examples from five countries (Nigeria, Ghana, Cameroon, Ethiopia and Kenya).

The analysis focuses on the links within the various GVCs driving these sectors and connecting local producers to export end markets. The discussion shows how the lead commodity firms facilitate or obstruct the breadth and depth of forward linkages, the factors that constrain a shift by local firms into value-added activities, and how government industrial policies can influence domestic industrialization.¹

The chapter finds that soft-commodity processing opens up major possibilities for value addition and commodity-based industrialization, but it requires large and resource-intensive interventions to expand and upgrade agricultural output. By expanding domestic and regional markets for inputs, these interventions will create multiple opportunities and economies of scale for developing backward linkages, related to local production of inputs such as fertilizers, small capital equipment and spare parts, maintenance and repair, and so on—and specialist service providers such as certification bodies, laboratories and business support.

The countries in this chapter have generally struggled to integrate forward into higher value added activities such as processing, marketing and distribution, to greater or lesser degrees.

The cocoa-processing industries in Ghana and Nigeria are growing (though from a low base) as seen in rising investment from private domestic and foreign sources and, in Nigeria, public listed companies. Public ownership remains important in both countries, largely owing to the strategy of global grinders to integrate backward into producing countries, relocating their processing

and purchasing facilities and working closely with local partners. Such integration helps them to secure supplies and allows them to adjust to changes in global chocolate manufacturers' specifications on quality and price very fast. It is also encouraged by policies to incentivize local processing, in Nigeria for example. In Cameroon by contrast, the weakness of the policy framework and of domestic capabilities mean that forward linkages are struggling to develop.

In Ethiopia's coffee sector and Kenya's tea sector, the lack of government policy has hampered linkage development, as has the fact that few global coffee roasters and tea manufacturers—the key drivers of these GVCs—have strategies to relocate value-added stages to producing countries. Coffee roasters, in particular, wish to retain control of their key processing activities—blending, roasting and grinding—which may be justified by the short shelf life of roasted products. Thus producing countries that want to move into roasting coffee for export markets must ensure very short lead times, as well as blending and packaging capabilities.

The cocoa and tea value chains offer more opportunities for local processing. Cocoa intermediate products (but not chocolate) and final tea products are more easily storable and tradable.

Soft-commodity processing opens up major possibilities for value addition and commodity-based industrialization, but it requires large and resource intensive interventions to expand and upgrade agricultural output.

Kenya's upgrading has been impressive in agro-products, as fresh-vegetable firms have moved into high value added exports. Underlying this are very high domestic capabilities to meet exacting standards, coupled with a very supportive policy framework that addresses every stage of the value chain. Success has been highly selective, however, as many smaller farms and exporters have failed to keep up with

global market requirements and have exited the value chain.

Ethiopia's case suggests that the upgrading trajectory of commodity-producing countries should be viewed within a framework that goes beyond processing. Indeed, for producing countries to reap higher revenues, an appropriate strategy could be to target fast-growing, speciality-coffee niche markets in a strategy that requires moving further downstream into marketing and distribution. It would also require highly sophisticated capabilities for cultivating consumer tastes, promoting products, and managing brands and distribution networks—while taking some ideas from how the wine industry denominates its products

The experiences suggest that links to international buyers are very important. For a firm, searching buyers for its products is costly but vital if it wishes to enter a GVC. Kenya's fresh vegetable exporters and Ghana's cocoa-processing firms have been fairly successful. Their insertion into the value chains dates back many decades, and they rely on relationships that took a long time to build. This implies that building these linkages is not easy or quick. For Ethiopia's coffee exporters or Cameroon's cocoa-processing firms, for example, it is very difficult to find buyers interested in higher value added products.

Once firms are inserted into a GVC, they have to meet very demanding market requirements—price, quality and lead times. Technical standards are also crucial when the markets are Europe, the US or Japan. “Private standards” based on social and environmental sustainability apply to cocoa, coffee and tea as much as to less traditional agro-processed products.

Assistance from the firms driving these GVCs therefore becomes very important to support local upgrading. Kenya's fresh vegetable exporters and Ghana's cocoa processors receive support from their global buyers in technical and non-technical areas, yet this is the exception rather than the rule. Other exporters operate at arm's length, which is particularly problematic

Regional and domestic markets offer opportunities for value-added products.

when they have to meet private standards that are becoming general-market rather than niche-market requirements. By becoming general requirements, these standards do not attract a price premium, but still create compliance costs.

A key finding of these case studies is that regional and domestic markets offer opportunities for value-added products. Nigerian cocoa-processing firms have found regional and domestic markets for confectionaries and beverages. Cameroon's chocolate manufacturers and Ethiopian roasted-coffee firms supply domestic retailers. Being inserted into regional value chains therefore offers the opportunity to build firms' capabilities in final-product manufacturing, marketing (including brand management) and distribution. This is particularly important for countries that (unlike Nigeria for chocolate and Ethiopia for coffee) do not have large domestic markets. Indeed, an illustrative example is provided by Ghana's intermediate cocoa producers that struggle to enter regional markets, because these markets demand final products—they are also seeing stiffer competition from Asia, which could be problematic if this trend curtails opportunities for African agro-processing industries.

High domestic firm capabilities and a supportive policy environment are essential in upgrading. A large domestic market is not always necessary, as seen with Kenya's fresh vegetable exporters. What is critical is that the competitiveness of the natural resource sector affects possibilities of developing forward linkages.²

Indeed, supply chain bottlenecks for local commodities are hampering the competitiveness of Africa's processing industries. The opportunity for processing firms to position themselves in quality-driven GVCs is constrained by the low quality of coffee or cocoa beans and poor post-harvest practices (such as cold chains, handling and transport) in Cameroon, Ethiopia and Nigeria, and by poor fresh vegetable farming practices in Kenya. High quality attracts a price premium in Ghana and Nigeria.

The regulatory frameworks therefore play an important role, and the demise of marketing boards has led to quality problems in most countries. But even in the few countries that retained institutional control over the commodity sectors (Ethiopia and Ghana) quality problems persist, particularly in Ethiopia, where such control discourages buyer–supplier links from upgrading growers’ capabilities. Such links have proved to be important between cocoa growers and processing firms in Ghana and Nigeria, and between farmers and tea and fresh vegetable exporters in Kenya. Indeed in Ethiopia, the only coffee farmers’ cooperative included in the case study is managing to address quality issues primarily because it can work with growers.

Supply chain bottlenecks are not the only issue. Costly access to finance and poor infrastructure cut across all case studies, and other issues include limited access to external markets, high-cost environments, high import tariffs on inputs, shortage of skills, corruption and security. These areas affect the quality, cost competitiveness and lead times of African processing firms. The policy implications of these findings are addressed in chapter 6.

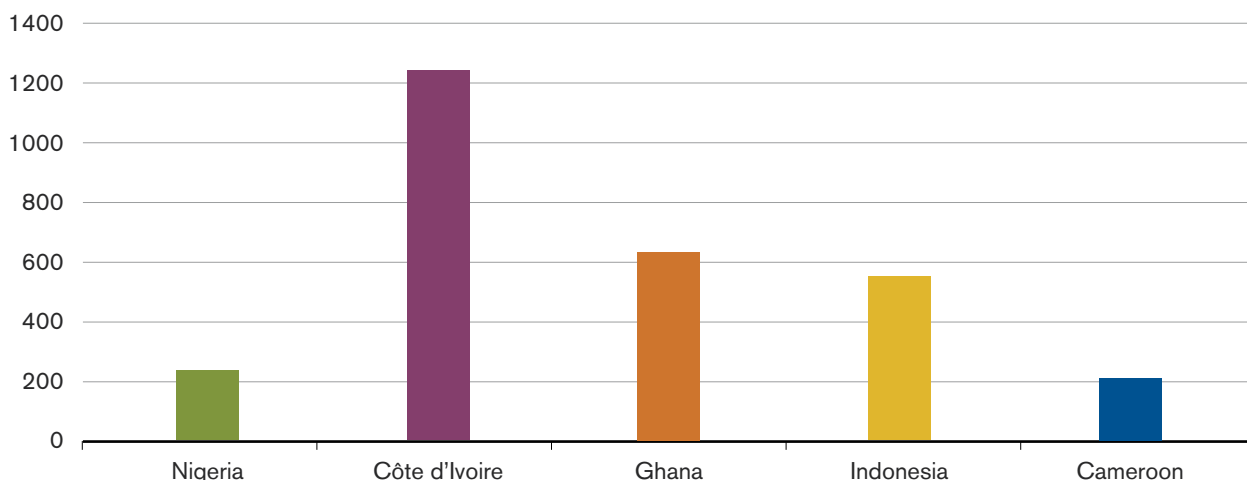
4.1 COCOA

The global value chain

A few countries in West Africa have traditionally been key global suppliers of high-quality cocoa beans (figure 4.1). Production is dominated by small farmers. In Ghana alone, 720,000 small farmers are involved in cocoa farming (Barrientos and Asenso-Okyere, 2008). From the 1980s, the cocoa sector has suffered from the twin challenges of declining world prices and deteriorating quality.

The first stems from the entry of new producing countries, especially in Asia—Malaysia, India and Indonesia—which base production around plantations as well as commercial and small farms. The second stems from the removal of national marketing boards as recommended by structural adjustment programmes, and the fact that traditional countries (Côte d’Ivoire, Cameroon and Nigeria) began exporting previously restricted inferior cocoa (Fold, 2002). Trade in poorer cocoa was facilitated by automation, allowing grinders to process cocoa beans of lower or inconsistent quality into standardized intermediate products that met the requirements of chocolate manufacturers.

FIGURE 4.1: COCOA PRODUCTION IN 2009/10 (THOUSAND METRIC TONS)



Source: ICCO (2012).

In the world market, where cocoa prices have increased (figure 4.2), the price surge has been

partly influenced by political instability in the world's largest producer, Côte d'Ivoire (box 4.1).

BOX 4.1: SOFT-COMMODITY PRICE MOVEMENTS

Since 2002, world prices for agricultural commodities, including coffee, cocoa and tea, have generally grown steeply. Record oil prices have led to higher production costs, which, with environmental concerns, have led to land reallocated to biofuel production and from food commodities. World supplies have been further eroded by adverse weather conditions and declining investment, aid, research and development (R&D) and productivity in developing-country agriculture since the 1990s. At the same time, a growing middle class in China, India and other emerging markets has raised global demand for food commodities.

Lastly, the financialization of commodity markets—that is the entry of banks and other financial institutions into commodities markets and the development of a range of financial instruments, some highly volatile and short term—has increased speculative movements, allowing prices to go far beyond levels dictated by market fundamentals (FAO, 2009; Farooki and Kaplinsky, 2012).

The price increases in nominal terms for coffee, cocoa and tea have been less dramatic than for other food products (cereals, oilseeds) but also less vulnerable to the global economic downturn (FAO, 2011).

FIGURE 4.2: WORLD COCOA PRICE, JANUARY 1980–SEPTEMBER 2012(\$ PER METRIC TON)



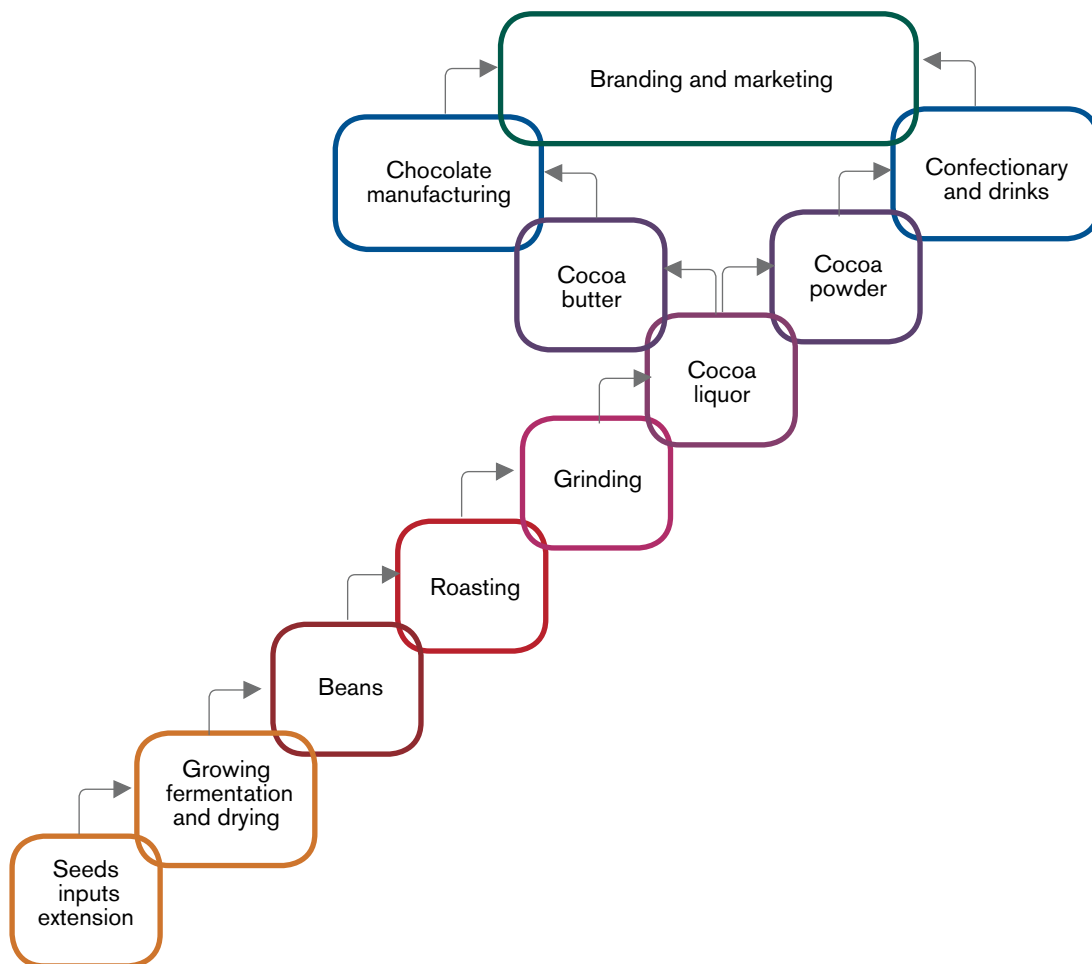
Source: IMF Primary Commodity Price monthly data, retrieved from www.imf.org/external/np/res/commod/index.aspx (accessed 20 October 2012).

Processing

Broadly, there are three types of cocoa—Forastero, Criollo and Trinitario (a hybrid of the first two). These types have several varieties. The Forastero variety is the most widely grown in West Africa and Brazil. Primary processing starts with harvesting (figure 4.3). Once cocoa beans are extracted from fully ripened pods, they are left to

ferment for six to eight days. Next, fermented beans are dried in sunlight or in artificial driers. Gradual drying is preferred for preparing high-quality beans. Great care must be taken in fermentation and drying because any defect in these stages cannot be subsequently rectified without affecting the quality of the final product. The shelling nature, colour, aroma and flavour of the dried beans show whether they are well fermented or not.

FIGURE 4.3: COCOA-CHOCOLATE GLOBAL VALUE CHAIN



Source: ECA and AUC.

The intermediate stage of the cocoa value chain starts after the beans are cleaned and roasted, and is capital intensive. After roasting, the beans are cracked to extract the nibs. The nibs are ground between heated grindstones or disc crushers, resulting in a thick, fluid, cocoa liquor (or paste).

Cocoa liquor solidifies into hard brown blocks, lumps or tablets after cooling. In this state it can be used by confectionaries (chocolate manufacturers). However, it is normally further processed into cocoa butter (which results in a by-product called cocoa cake) and into cocoa powder (box 4.2).

BOX 4.2: COCOA BUTTER AND COCOA POWDER

Cocoa butter is one of the best-known stable fats, containing natural antioxidants that prevent rancidity and give it a storage life of two to five years. It is used in food products (white chocolate) and non-food goods (pharmaceuticals, cosmetics, soaps and lotions).

Cocoa powder, the solid product resulting from processing cocoa liquor, can be used alone (cocoa drinks) or recomposed with other ingredients (biscuits, sweets and chocolates).

Cocoa intermediate products such as cocoa paste, butter, powder and cake are easily storable and tradable, two characteristics that have made it possible to relocate processing facilities in producing countries (Talbot, 2002).

Market concentration

Two types of lead firms dominate forward linkages in the cocoa GVC: grinders and chocolate manufacturers. They control the links characterized by the highest value added and profitability: trading and marketing (Barrientos and Asenso-Okyere, 2008). Supermarkets, which account for an estimated 54 per cent of the global chocolate retail sector, are trying to appropriate a larger share of the value added by selling their own-brand products.

Increasing market concentration through mergers and acquisitions has characterized both grinders and chocolate manufacturers. Since the 2000s, a handful of grinders have dominated the intermediate stages of the cocoa GVC: Cargill, Archer Daniels Midland and Barry Callebaut. They control R&D and technologies in food processing, and bulk logistics. This has created very high knowledge and capital barriers to entry. In order to manage large logistical systems, grinders

have vertically integrated backward, relocating purchasing, grading and shipping functions to producing countries. Their purchasing arrangements vary: they deal with local traders and cooperatives in Cameroon and Côte d'Ivoire, purchase on the open market in Nigeria and buy from the marketing board in Ghana. The competitiveness of large grinders' operations has sidelined international traders and warehouses.

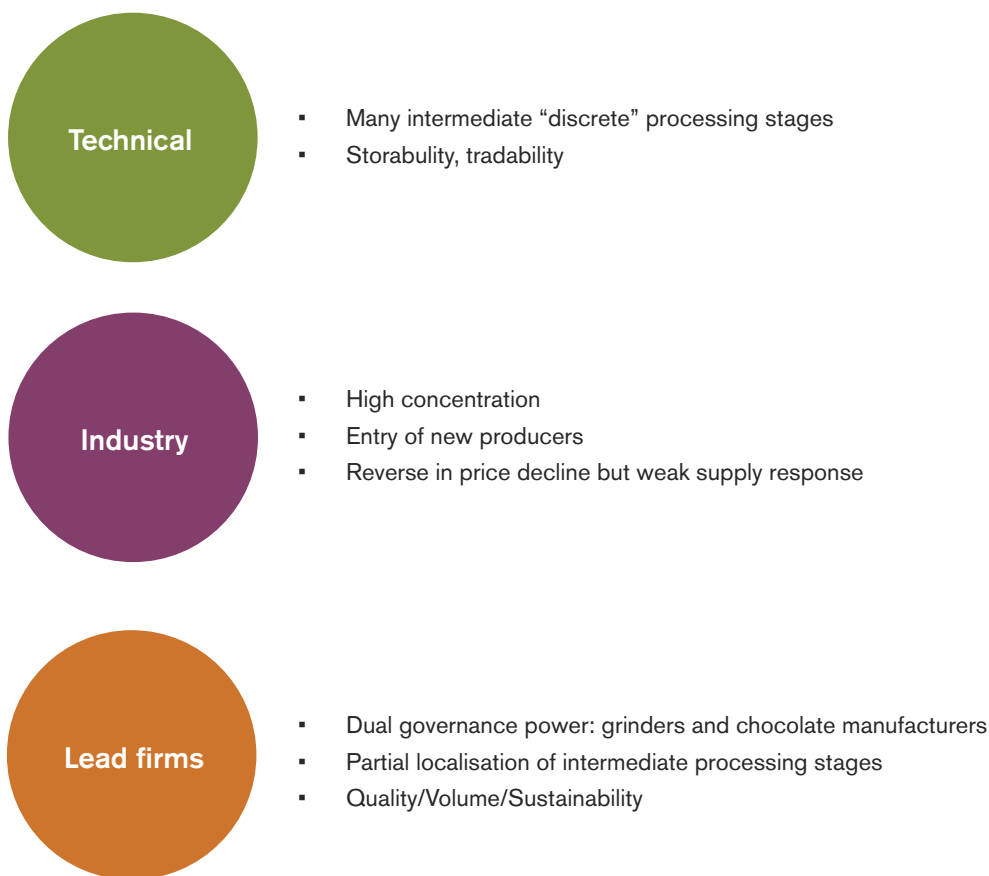
Chocolate manufacturing is dominated by a few European and US transnational corporations (TNCs), such as Nestlé, Mars and Ferrero (Fold, 2002). During the 1990s, these outsourced intermediate manufacturing stages, in some cases even standard chocolate production, to grinders. This enabled them to focus on their core business of product development, marketing and distribution, as well as on high value added products and markets differentiated by product quality and by social and environmental standards (Barrientos, 2011). The only exceptions are smaller manufacturers like Ferrero and Lindt & Sprüngli, which remain vertically integrated to preserve commercial secrecy and tight quality control systems.

To supply intermediate products on a just-in-time basis and to comply with national standards, grinders have

invested in technological and logistical capabilities, increasing their market power along the GVC. Chocolate manufacturers nevertheless are interested

in maintaining some competition in the intermediate stages of the value chain, to avoid grinders encroaching on their core businesses and profits.

FIGURE 4.4: SALIENT ELEMENTS OF THE COCOA VALUE CHAIN



Source: ECA and AUC

Challenges for producers and manufacturers

The global market for chocolate can be divided into three segments: high-volume, low-value bulk chocolate; mainstream standard-quality chocolate; and high-quality niche markets, such as single origin, Fair Trade and organic (Barrientos, 2011). Global consumption is driven by demand growth for low-value chocolate in emerging economies. Niche product markets have grown far faster than low-

value and conventional product markets, although from a low base, which is why quality, diversification and brands are key for manufacturers.

Developing countries' contribution to value added in the GVC fell by half between the early 1970s and the end of the 1990s (World Bank, 2008). In Africa, producing countries are excluded from control over global logistics and marketing, and from intermediate and final product manufacturing.

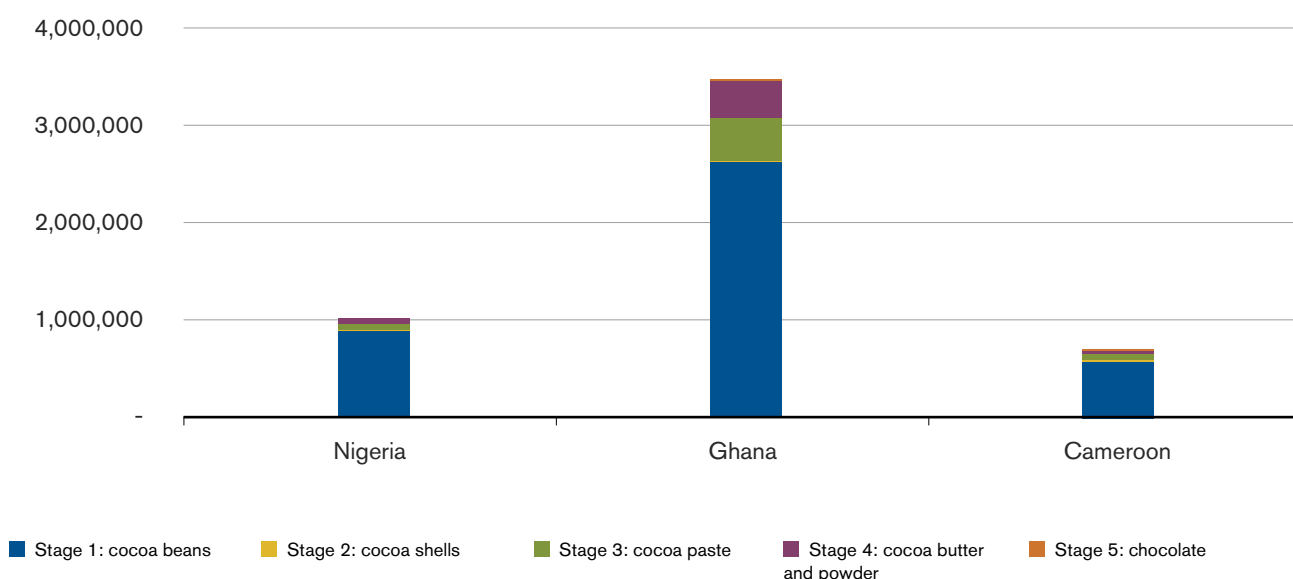
Moreover, the supply response of cocoa bean production to the price surge in the 2000s has been very slow (Barrientos, 2011). This is not only attributable to long time lags (five years between planting and first harvesting) but also to low farm-gate prices over two decades, deterring farmers.

Chocolate manufacturers need to respond to the twofold challenge of increasing the volume of production, and the quality of cocoa beans. Moreover, growing consumer concern for sustainable development, has led, for example, to the Netherlands market committing to 100 per cent certified sustainable cocoa by 2025. For these reasons, chocolate manufacturers are becoming involved in initiatives with growers in producing countries. The International Cocoa Initiative brings

together companies, politicians, civil society and workers to fight child trafficking and illicit labour practices. The Sustainable Trade Initiative cocoa programme brings together more than 40 per cent of the worldwide cocoa-processing industry and 30 per cent of worldwide chocolate manufacturing businesses to support sustainable production of cocoa in Brazil, Cameroon, Côte d'Ivoire, Ecuador, Ghana, Indonesia, Nigeria and Vietnam.

Processing links are weak in all three cocoa case study countries (figure 4.5). In Ghana, the largest producer by far and exporting more than \$3.5 billion of cocoa, raw bean exports represent 76 per cent of the total, Nigeria 83 per cent (of \$1 billion) and Cameroon 87 per cent (of almost \$0.7 billion).

FIGURE 4.5: VALUE-ADDED CONTENT OF COCOA EXPORTS, GHANA, NIGERIA AND CAMEROON 2011 (\$ THOUSAND)



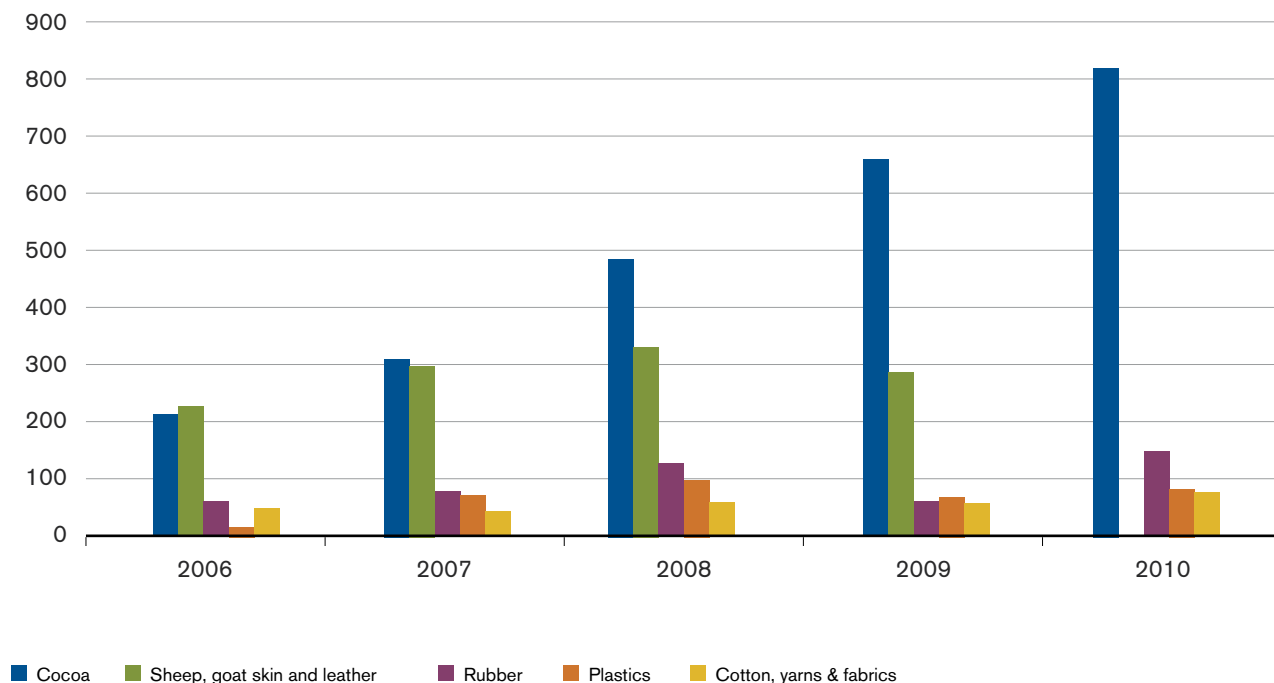
Source: ITC Trademap, retrieved from www.trademap.org/SelectionMenu.aspx (accessed 30 August 2012).

Nigeria's cocoa industry

Nigeria is the world fourth-largest cocoa producer. Cocoa has been the largest non-oil export since 2007 (figure 4.6). In 2006–2010, cocoa exports

rose by 47 per cent to \$822.8 million. But only about 20 per cent of the cocoa output is processed locally, with the rest exported as raw beans (Mwanma, 2011). Chocolate, however, is heavily imported into Nigeria from Europe and the US.

FIGURE 4.6: NIGERIAN FEDERAL GOVERNMENT REVENUES FROM NON-OIL EXPORTS, 2006–2010 (\$ MILLION)



Source: Nigerian Export Promotion Council data.

Note: Sheep, goatskin and leather data are unavailable for 2010.

Background

Nigeria's cocoa-processing industry was established between the 1960s and the 1970s, with three factories set up in the south-west (Iyama, 2007). In the following decades, more factories were set up in the western states. Most processing companies, national and international, are private, and some are listed on the Nigerian Stock Exchange.³ Processors are organized under the umbrella of the Cocoa Processors Association of Nigeria (COPAN). They are fairly important for income, with each factory employing about 200 workers and providing up to 1,000 indirect jobs.

Nigerian processing companies are involved in both intermediate and final stages of the cocoa-chocolate value chain. Companies such as Multitrex Integrated Foods Plc, Tulip Cocoa Processing Ltd and Stanmark Cocoa Processing Company Ltd

produce cocoa butter, cake, liquor and powder. TNCs such as Cadbury Plc and Nestlé produce beverages (Bournvita and Milo) and confectionaries.

Five firms' perceptions

Five medium to large processing firms were selected for this case study. Three out of the five are state owned, two of which have foreign minority ownership. Some of these companies are part of conglomerates, and directly control other subsidiaries in Nigeria. All but one are listed on the Nigerian Stock Exchange. According to information collected through face-to-face interviews in 2012, the firms' core businesses are manufacturing intermediate products, confectionaries and beverages, and trading cocoa and other agro-products.

Europe represents the bulk of their export market, absorbing as much as 97 per cent of one company's

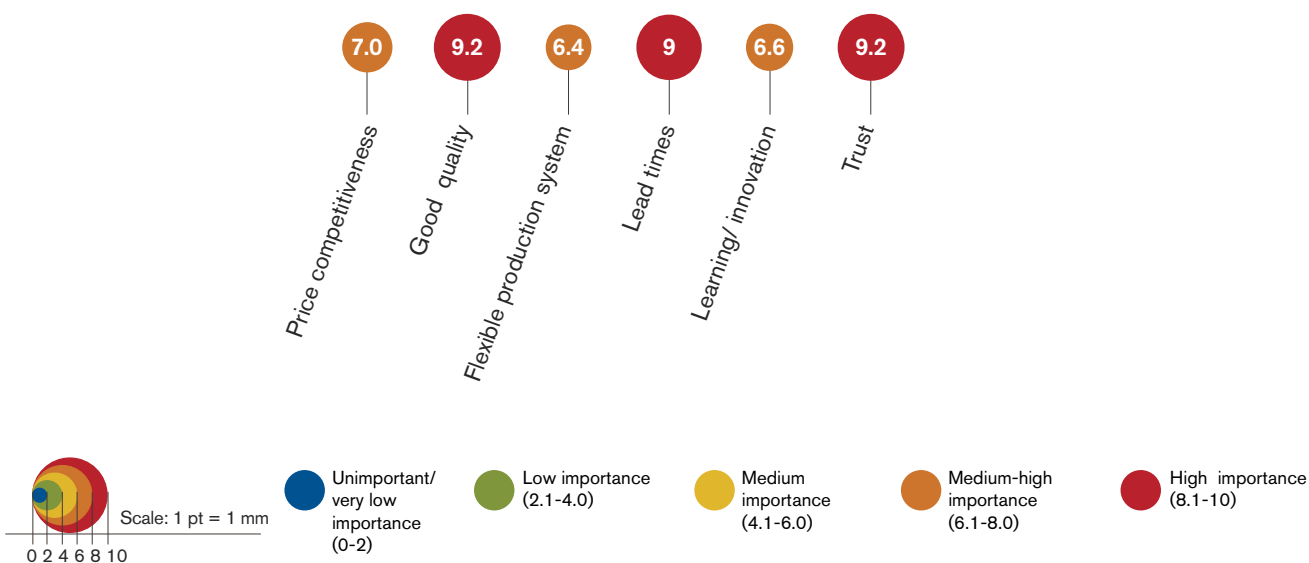
output. New export markets are China, India and North America. Major buyers include local and international traders, wholesalers and retailers. Two firms producing beverages and confectionaries export 35–55 per cent of their output to regional markets, highlighting that regional markets open opportunities for higher value added products, unlike developed-country markets where TNCs tightly control the final stages of the cocoa GVC.

The five firms were asked to rate the weight attached by their buyers to six market parameters, or critical success factors (CSFs), on a Likert scale of 1 to 10 (10 being very important, 1

unimportant),⁴ which are represented on radar charts.

According to the firms, key critical success factors are good quality, trust and lead times (figure 4.7). Different markets have different expectations of price and quality. Domestic markets are easier to supply because of low trade barriers, but foreign markets offer a price premium for high-quality cocoa. Relations with buyers tend to be at arm's length—when cocoa-processing firms fail to meet CSFs, foreign buyers do not assist them but rather sanction them by excluding them from the supply chain.

FIGURE 4.7: BUYERS' CRITICAL SUCCESS FACTORS IN NIGERIA'S COCOA INDUSTRY



Source: Interviews with five processing firms, 2012.

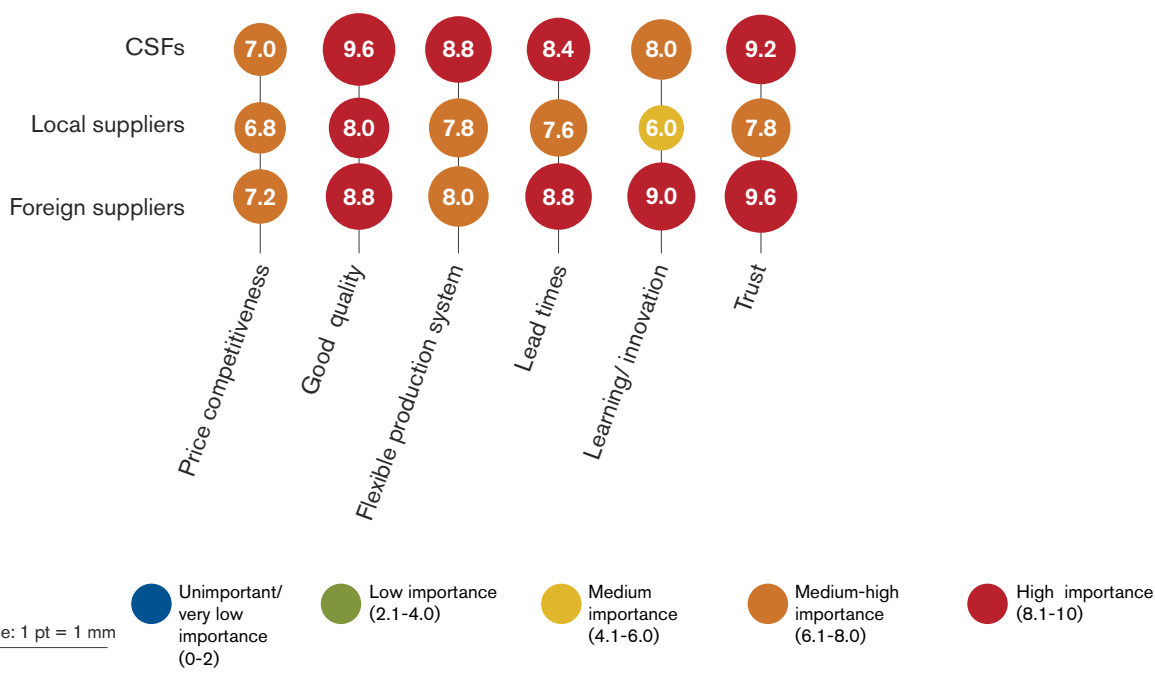
The cocoa-processing firms identify opportunities for upgrading by moving further up the cocoa–chocolate value chain (by producing ready-to-drink chocolate, for example, but they need to resolve challenges first) and diversifying horizontally (by producing such products as palm kernel oil, palm kernel cake, sesame, cotton, cashew and ginger).

Consistent with their own international buyers, cocoa-processing firms place heavy emphasis on good quality, trust and lead times when dealing with their suppliers (figure 4.8). Again, price

competitiveness is not the most important CSF. Based on their experience, firms rated local suppliers as underperforming compared with foreign suppliers. Preference for foreign suppliers over local suppliers was more marked in trust and in learning/innovation. (The firms noted some improvement in suppliers' capability in price competitiveness and quality.)

Supplier performance is very important for the firms' competitiveness. Over time, Nigeria's weak extension services have resulted in poor quality of cocoa bean supplies.

FIGURE 4.8: RATING OF LOCAL AND FOREIGN SUPPLIERS RELATIVE TO LEAD-FIRM EXPECTATIONS IN NIGERIA'S COCOA-PROCESSING INDUSTRY



Source: Interviews with five processing firms, 2012.

To address some of these supply chain bottlenecks, cocoa-processing firms often assist suppliers to meet technical standards by imparting training on farming best practices and by providing high-quality seedlings. The firms monitor suppliers' compliance with standards, and have allocated from 2 to 30 staff, depending on the firm's size, to monitor and assist suppliers. The firms also work with external facilitators such as the Sustainable Trade Initiative, International Finance Corporation and United States Agency for International Development (USAID) in training, finance and input support services.

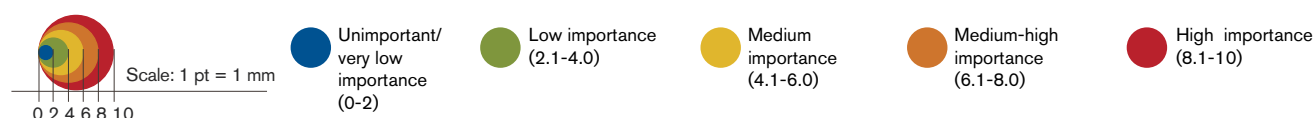
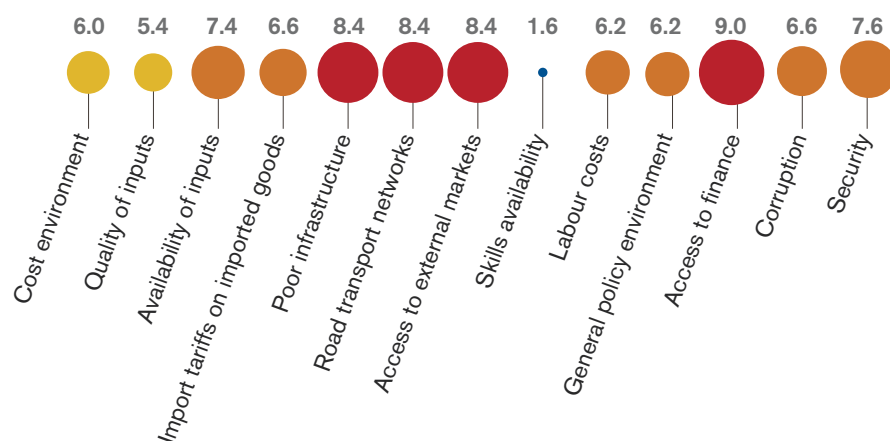
Other constraints affect the cocoa-processing industry (figure 4.9). Access to finance is marginally the worst. A medium-sized factory requires about 3 billion in capital to operate profitably, plus working capital to purchase thousands of tons of beans. Borrowing costs are as high as 20–23 per cent a year for working capital. At the same time, capacity utilization is low, which makes it difficult to absorb fixed operating costs. The capital market therefore discourages investment in value-added activities for both new and existing firms.

The industry is also affected by poor infrastructure—electricity supply, water, telecoms, road/transport networks—and security. In particular, private energy generation raises product costs steeply, with an average expense of N1 billion on fuel a year by the industry (COPAN, 2010).

Supply chain bottlenecks relate not only to high costs and inadequate supplies of cocoa beans to local factories, but also to high costs of spare parts for imported machinery that are unavailable in Nigeria (COPAN, 2010).

Access to external markets is problematic because of tariff escalation (see Factors in linkage development, chapter 3). Under the EU tariff regime, raw cocoa beans are duty free. But as Nigeria has not signed an Economic Partnership Agreement with the EU, the country cannot benefit from trade preference margins of 4.2 per cent for cocoa butter and 6.1 per cent for liquor/cake, which loses the processing industry about \$30 million a year. The impact of the tariff structure on value-added products is compounded by the cost difference between processing companies, which have high overheads and labour costs, and cocoa bean traders.

FIGURE 4.9: RATING OF FACTORS AFFECTING LINKAGE DEVELOPMENT IN NIGERIA'S COCOA INDUSTRY



Source: Interviews with five processing firms, 2012.

Nigeria does not have an industrial policy for cocoa processing, but provides incentives for manufacturers and processors in general, the most important of which for cocoa exporters is the Export Expansion Grant (EEG).⁵ Given that cocoa-processing firms are involved in exporting, they are entitled to these incentives.

The EEG is the most relevant for forward linkages to the cocoa sector. An employment quota for processing firms to be eligible for EEG is another indirect incentive to increase local skills. The EEG has encouraged cocoa-exporting companies to embark on forward integration and undertake heavy investment in plant and machinery, although implementation is often problematic. Surveyed firms noted cumbersome application procedures and delays in processing and paying grants: the 2008/09 EEG, for example, had yet to be disbursed in 2012, and COPAN in 2009 had

to petition the federal government to urgently release EEG funds as firms faced a liquidity crisis. Similarly, equipment and spare parts are meant to be free of import duty under the New Manufacture in Bond Scheme but cocoa-processing firms are almost always forced to pay duty. They are too vulnerable to argue for duty-free treatment when importing because they need the inputs urgently, and any clearance delays would invariably cause them production losses.

One of the severest constraints for developing forward linkages is that, while the processing stages of the cocoa value chain have incentives, cocoa bean production has none. The deregulation of the domestic cocoa market in the 1990s, in the absence of an overall sector strategy, have created problems for cocoa bean quality and incentives to value addition. Policy synergy is essential for the success of linkage industries (box 4.3).

BOX 4.3: AGRICULTURAL, INDUSTRIAL AND TRADE POLICIES WORKING TOGETHER FOR MALAYSIA'S PALM OIL INDUSTRY

Malaysia is the world's largest producer and exporter of palm oil. The industry's success rests on a range of agricultural, industrial and trade policies.

In the 1970s, production of palm oil was expanded through a resettlement programme and the conversion of plantations from rubber to oil palm (Fold, 2002). Palm oil cultivation expanded from 55,000 hectares in 1960 to 3.4 million hectares in 2000 (Kjöllerström and Dallto, 2007). The government established regulatory agencies in areas such as quality control and contract registration, and invested in R&D in agricultural productivity, value-added industries and quality improvements.

Local capital, sometimes in joint ventures with Indian and Japanese companies, invested in milling and refining industries, which became increasingly competitive in developing countries' export markets. With time, these companies became more concentrated and vertically integrated, and state capital became more prominent in plantations and milling operations (Fold, 2002). A key role was played by the export duty system which from the 1960s systematically favoured local processing into semi-processed oil products, final consumer goods and advanced chemical products.

In later years, as palm oil became a traditional industry, Malaysia targeted diversification into new industries and set incentives to produce and export cocoa (Talbot, 2002). By the mid-1990s, it had become the world's largest cocoa butter exporter, before slipping to second place after the Netherlands.

Nigeria lacks an industrial skills training programme for cocoa processing. The state makes little effort to orient public activities in infrastructure, R&D or human capital development for industrial development and value addition in this industry. Cocoa-processing firms themselves, however, invest in workers' training and education programmes, enabling them to maintain good manufacturing practices and obtain international certification.

Ghana's cocoa industry

Ghana is the world's second-largest cocoa producer, and cocoa is the country's second-biggest foreign exchange earner (after gold), accounting for 23 per cent of merchandise export earnings in 2011—the industry generated around \$3.5 billion in export earnings, as the world market price gained by about 81 per cent over the previous half decade. Cocoa provides a livelihood for over 700,000 farmers, mainly in the south. The crop also

accounted for 5 per cent of government revenues in 2005, through export taxes. In 2010, Ghana's strong receipts from trade taxes were mainly due to cocoa export revenues (ISSER, 2011). Cocoa was also one of the major drivers of Ghana's economic growth, increasing its share of GDP from 2.5 per cent in 2008 to 3.6 per cent in 2011.

The proportion of cocoa exports processed domestically has doubled from about 12.4 per cent in 2007 to 25.6 per cent (226,200 metric tons) in 2011. This suggests strong growth prospects for the industry as it moves up the value chain.

Role of the Ghana Cocoa Board

Unlike many other producing countries, Ghana in the 1990s did not dismantle its cocoa marketing body, the Ghana Cocoa Board (COCOBOD). While allowing private, registered buyers to control domestic marketing, Ghana retains government

control over exports and, critically, over grading and quality assurance. Quality control in particular is exercised along the whole value chain in the country (figure 4.10). Ghana's cocoa beans have high fat content and rich flavour, owing partly to careful fermentation and drying processes by farmers.

The Cocoa Research Institute (an arm of COCOBOD) is responsible for research into pests and diseases; it also introduces control measures. In 2001, the Cocoa National Disease and Pest Control Committee was established to develop strategies to control capsid and blackpod through a nationally coordinated spraying programme. Under this, COCOBOD, through a network of regional offices, sprayed all cocoa fields at no cost to producers, containing the threat. Under the Cocoa Hi-technology programme, which began in 2002/03, farmers were supplied with packages of fungicides, pesticides and fertilizers to help increase their yields.

Because of its ability to guarantee higher-quality beans, COCOBOD provides more stable prices for Ghanaian producers by selling a large share of its production directly on forward markets. It also secures a price premium of around \$200–250 a metric ton. COCOBOD sets pan-seasonal and pan-territorial producer prices in advance of the harvest (Fold, 2002), moves supported by the lead buyer in the value chain, Cadbury, which has sourced cocoa from Ghana for over a century. Its demand for single-origin, quality-certified cocoa means that the company has an interest in COCOBOD retaining full responsibility for quality control of all production stages.

Although quality remains high, Ghana suffers from structural constraints to productivity growth owing to an ageing farming population, poor extension services and weak infrastructure (Barrientos, 2011). In 2008, Cadbury launched the Cocoa Partnership with a view to working with stakeholders to promote sustainable livelihoods. As part of this effort, Cadbury converts some of its lead products into Fair Trade, to pass to Ghanaian producers a minimum guaranteed

price and a price premium. Nestlé adopted a similar approach in 2009.

Four firms' perceptions

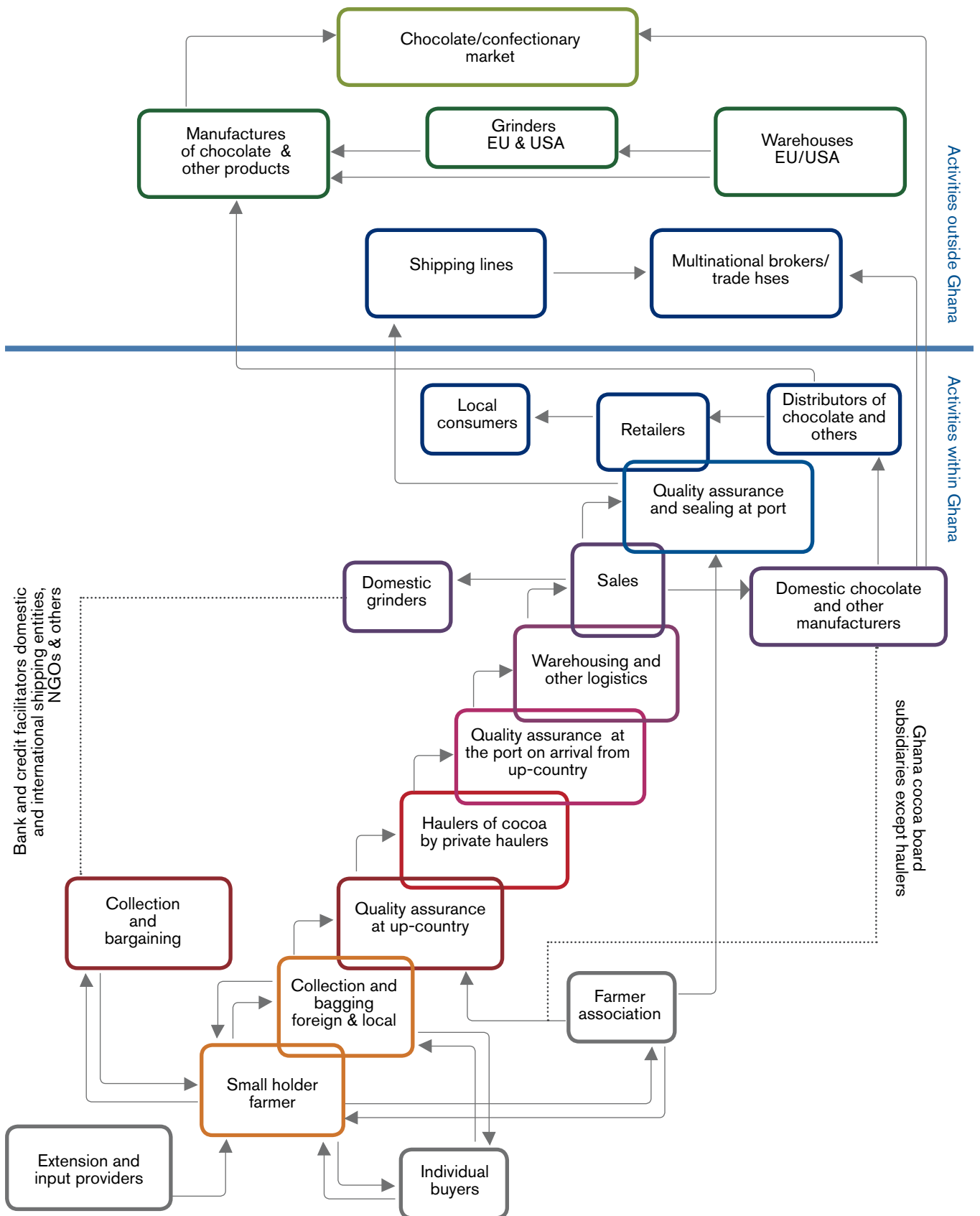
The cocoa-processing firms selected for Ghana's case study are a publicly owned company established in 1965, and three locally owned, recently established private companies. They employ 100–277 workers each, skilled and unskilled equally. These firms are positioned at different stages of the value chain. One firm is involved in roasting, grinding and packaging, and exports cocoa liquor. The remaining firms are further downstream, in pulverizing activities, and producing cocoa butter and powder.

The four firms export mainly to European buyers. Their main competition comes from large grinders in Ghana—Barry Callebaut and Cargill in Tema, and Archer Daniels Midland in Kumasi—and several local exporters. The only firm producing higher value added products directs 10 per cent of its output to domestic and regional markets, which are, however, difficult to supply, as they demand finished products (European buyers want intermediate products).

For the firms, quality, price and trust are the highest CSFs set by their buyers (figure 4.11). Buyers ensure high-quality supplies from their Ghanaian cocoa-processing suppliers by building trust-based relationships, which provide a premium for quality and assist in firms' upgrading. The market also has requirements, including national technical regulations: Japanese buyers are quality driven, Israeli buyers require Kosher certification, and so forth.

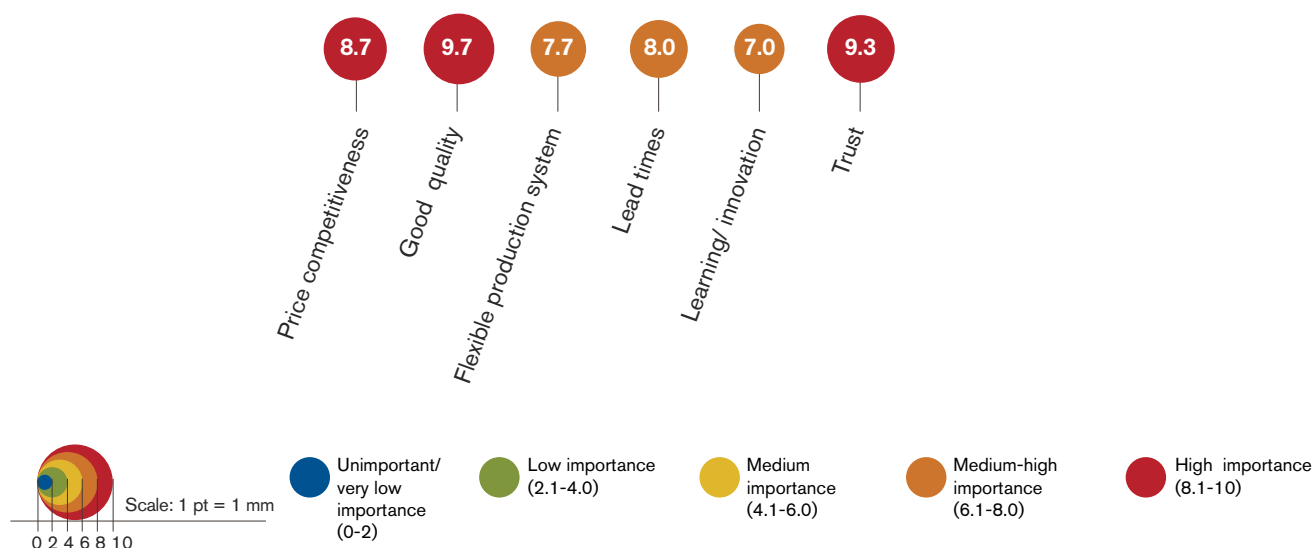
Linkages to buyers support these firms in various ways: European buyers buy forward, helping the firms to plan properly; Egyptian buyers supply them with labels to ensure compliance with their corporate and government standards. Buyers also assist firms by recommending materials and equipment and sometimes by providing technical support.

FIGURE 4.10: GHANA'S COCOA VALUE CHAIN



Source: ECA and AUC

FIGURE 4.11: BUYERS' CRITICAL SUCCESS FACTORS IN GHANA'S COCOA INDUSTRY

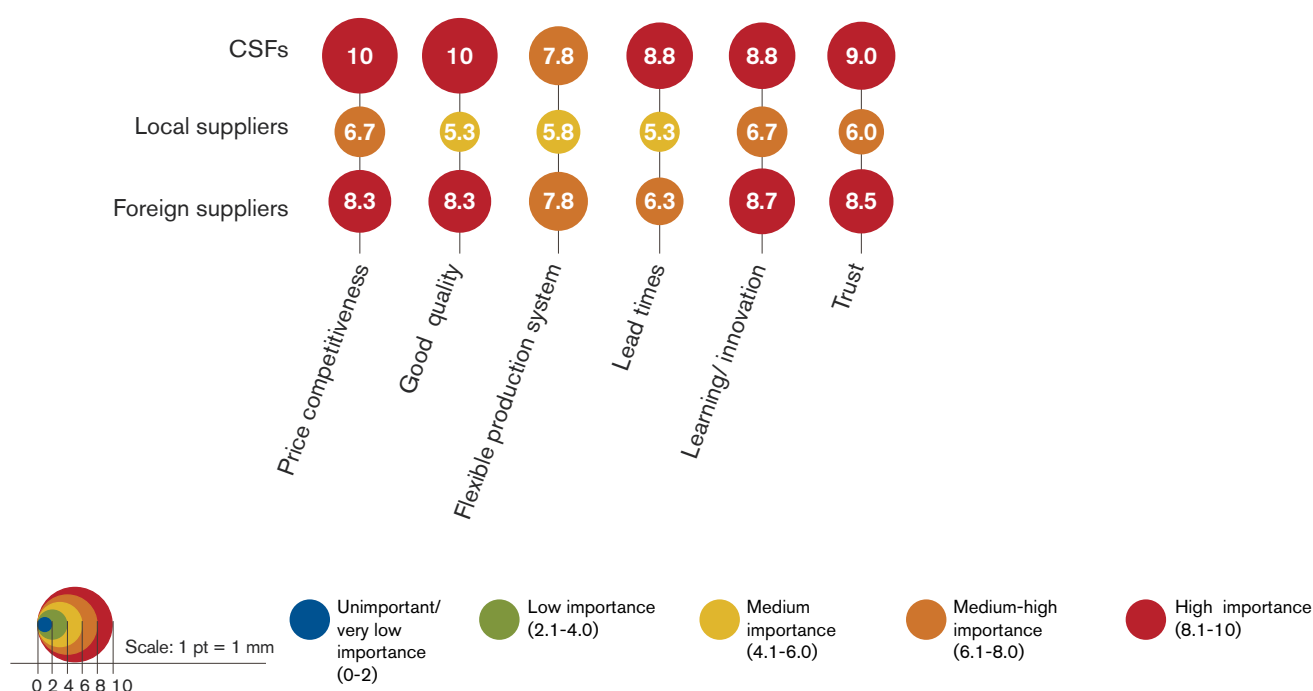


Source: Interviews with four processing firms, 2012.

The CSFs set by international buyers are passed down the value chain to cocoa bean suppliers. Quality, trust, price, learning/innovation and lead times are very important market requirements for

local suppliers (figure 4.12). Cocoa-processing firms feel that foreign suppliers are more competitive than local ones, particularly on quality and trust.

FIGURE 4.12: RATING OF LOCAL AND FOREIGN SUPPLIERS RELATIVE TO LEAD-FIRM EXPECTATIONS IN GHANA'S COCOA INDUSTRY

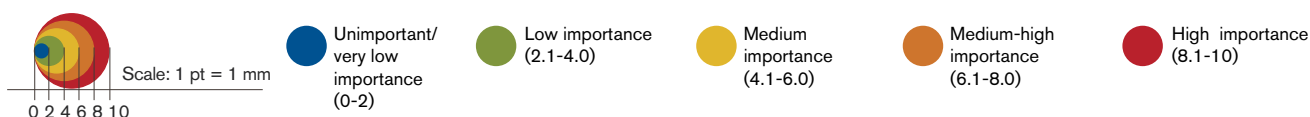
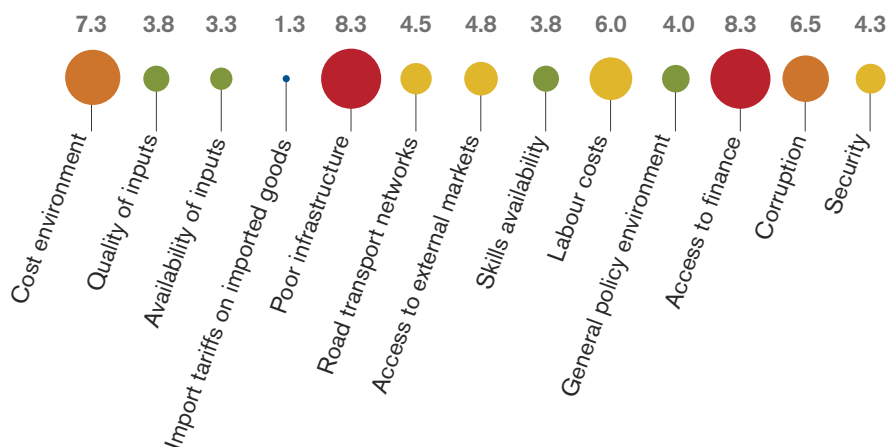


Source: Interviews with five processing firms, 2012.

Local suppliers face serious constraints in capital, skills and entrepreneurship. Poor infrastructure and unreliable electricity make it very hard to adopt just-in-time procurement strategies, because deliveries are delayed, down-time costs are high, and communication is difficult. In their relationship with suppliers, however, cocoa-processing firms go beyond monitoring activities, and assist them with quality and delivery times, helping to improve the suppliers' capabilities.

All the surveyed cocoa-processing firms identify upgrading opportunities for moving into higher value added products than their current output—cocoa butter, powder and liquor—as well as manufacturing chocolate and drinks. That move is constrained primarily by access to capital, infrastructure, costs and corruption (figure 4.13). Another key issue is small market size for finished products.

FIGURE 4.13: RATING OF FACTORS AFFECTING LINKAGE DEVELOPMENT IN GHANA'S COCOA INDUSTRY



Source: Interviews with four processing firms, 2012.

Cocoa production in Ghana has recorded strong growth, increasing from 340,600 metric tons in 2001/02 to 1 million tons in 2011, stimulated by policy interventions and high world prices. Measures include controlling diseases and pests (often through COCOBOD), encouraging farmers to rehabilitate and replant old and moribund farms, and applying fertilizer. Steps to enhance farmers' welfare include a remunerative producer price at least 70 per cent of the net projected FOB value to farmers; periodic bonuses; a national health insurance scheme and clinics; and scholarships at secondary school.

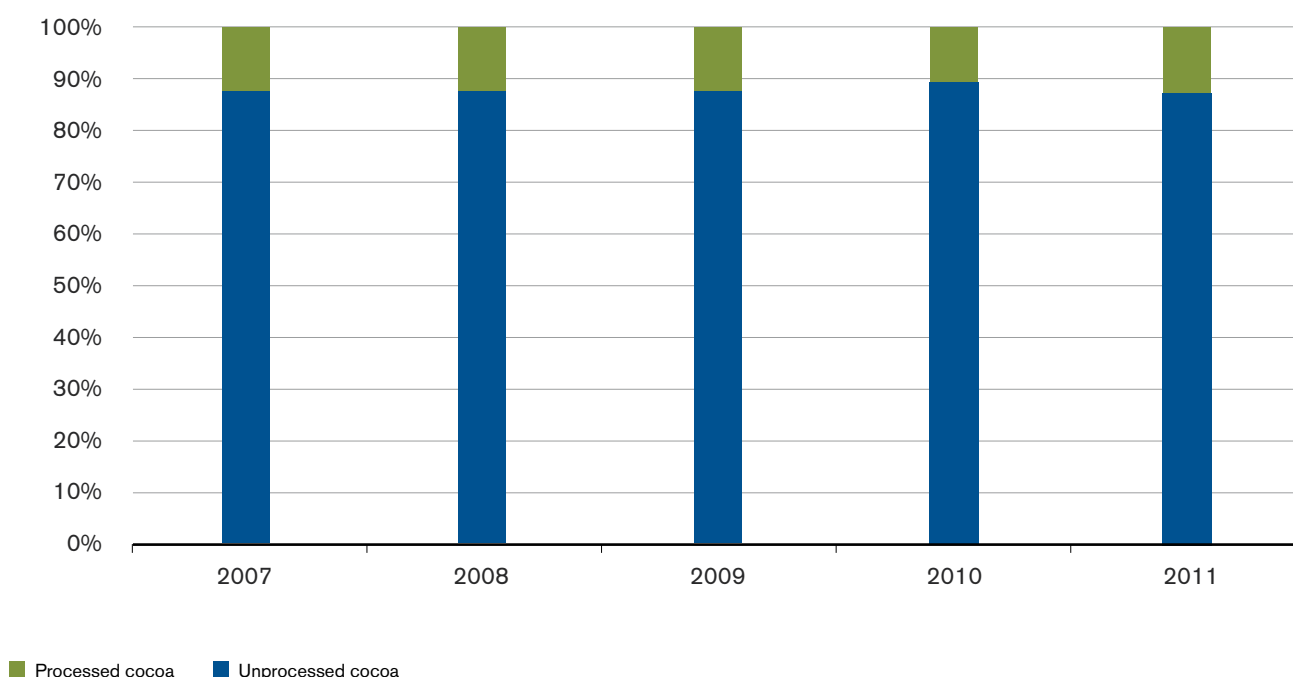
The government has also made a commitment to take internal processing to at least 40 per cent through support for domestic processing companies in the form of price discounts, extended credit payment, permission to import essential machinery, and enforcement of export processing zone status for companies there. Surveyed firms reported that export processing zones have been well set up, attracting foreign direct investment from global cocoa grinders.

Cameroon's cocoa industry

The bulk of Cameroon's cocoa is exported as raw beans: in 2011 only 28,397 metric tons of the total 218,702 metric tons of cocoa was locally processed (according to the Office National du Café et du

Cacao, the regulatory body)—a mere 13 per cent. In 2007–2011, less than 8 per cent was transformed locally (figure 4.14). Despite the authorities' interest in and efforts to promote local processing, integration between agriculture and the industry remains dismal.

FIGURE 4.14: CAMEROON'S VALUE-ADDED CONTENT OF COCOA EXPORT VOLUME, 2007–2011 (%)



Source: Office National du Café et du Cacao, 2012. <http://www.freeyengo.com/services/food-amp-dinning-in-cameroon/office-national-du-cacao-et-du-cafeoncc-331.htm>, accessed 30 September 2012.

The processing industry is controlled by a handful of foreign and domestic companies, most of them in intermediate-product manufacturing, which has been largely dominated by Société Industrielle des Cacaos (SIC Cacaos) since it was set up in 1949. Under majority Swiss ownership (and minority public participation) the company has a processing throughput of 30,000 metric tons a year and employs around 100 workers. The firm now faces competition from other smaller domestic processing companies, employing 20–30 workers. New investment in Mbalmayo,

in the centre of the country, has targeted cocoa processing, and is exporting mainly to China.

Finished cocoa products have also been dominated by one firm for several decades—Chococam, the country's sole processor. It has nearly 60 per cent of the domestic chocolate market, and exports to regional markets. But this company, too, now faces stiff competition, this time from Asia, whose finished products have an increasing share in domestic and subregional markets.

Three firms' perceptions

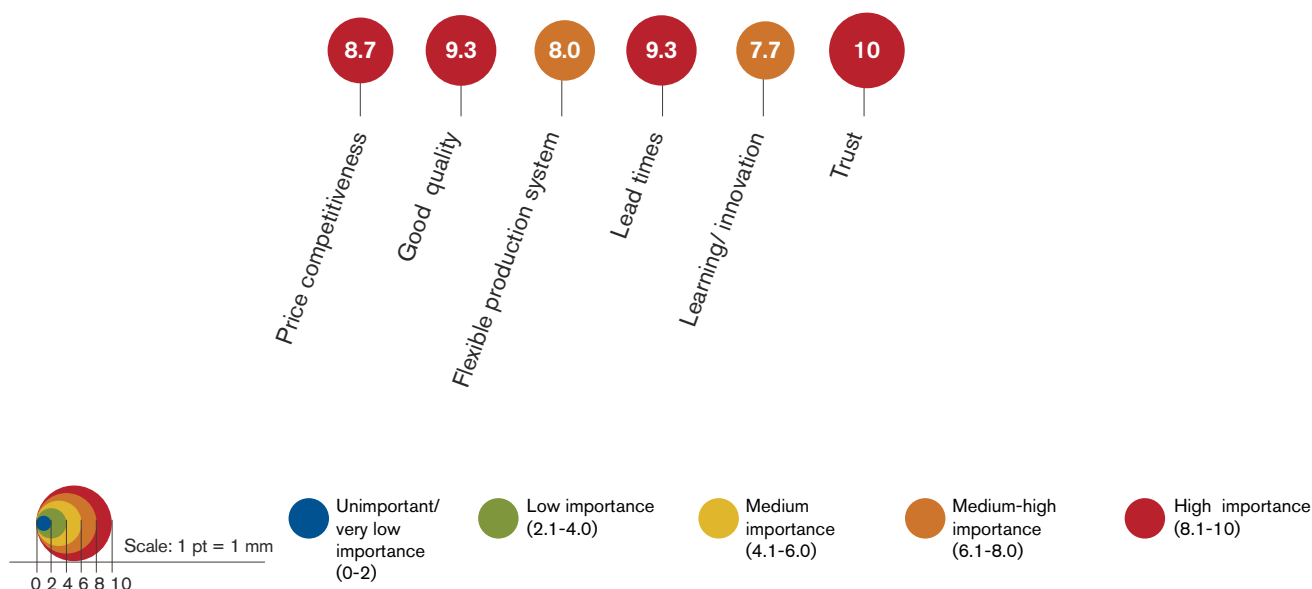
The case study on Cameroon cocoa-processing industry covered SIC Cacaos and two of its smaller competitors. SIC Cacaos is linked to the GVC dominated by European and US chocolate manufacturers, which absorb 95 per cent of its production.

The two domestic competitors target wholesalers in Asia, particularly China, and wholesalers and

retailers in the domestic market. Both have experienced substantial sales growth.

For the Asian market, quality, trust and lead times are CSFs for the three firms. The domestic market is less demanding, allowing them to move further downstream into chocolate manufacturing. But they find it very hard to enter industrial-country GVCs because of high entry barriers related to standards and price. Trust, lead times, quality and price emerge as the key CSFs for the firms (figure 4.15).

FIGURE 4.15: BUYERS' CRITICAL SUCCESS FACTORS IN CAMEROON'S COCOA INDUSTRY



Source: Interviews with three processing firms, 2012.

The highest-ranked CSFs applied by cocoa-processing firms to their suppliers are trust, lead times, quality, flexibility, price and innovation (figure 4.16). Local suppliers underperform in two critical areas—quality and price.

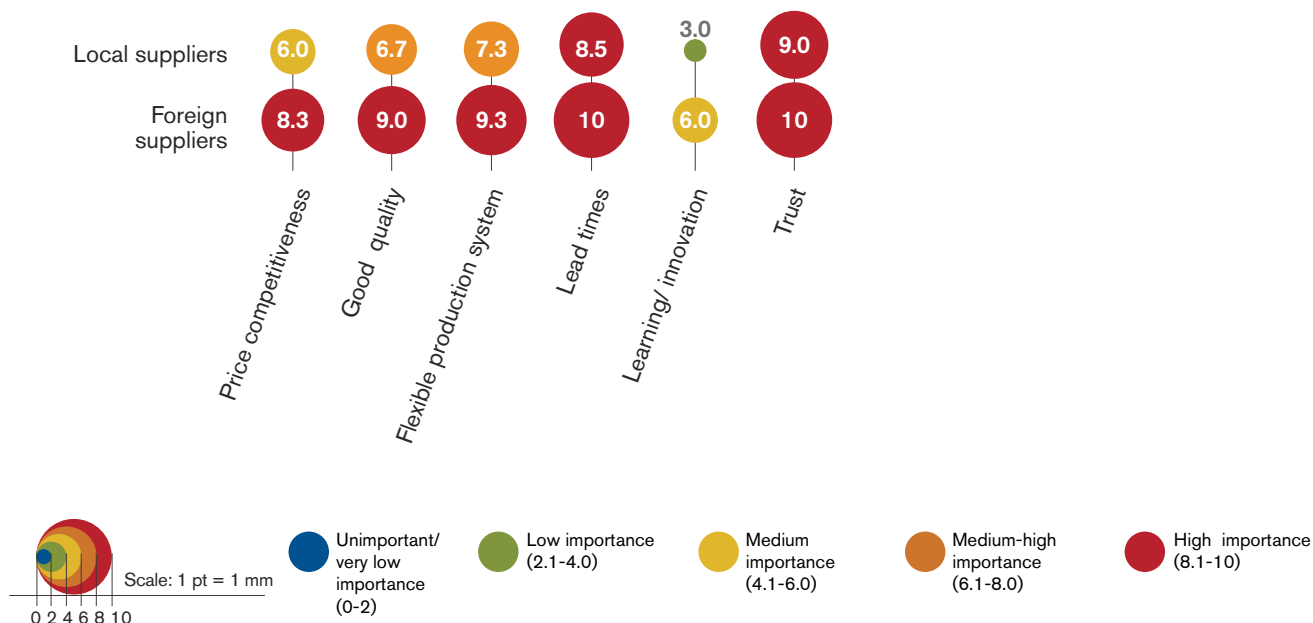
The government has a strategy to revive production of major cash crops. In 2006, the Société de Développement du Cacao embarked on a vast cocoa-seedling production and distribution programme. The aim was to distribute 6 million seedlings yearly to set up 5,000 hectares of modern cocoa plantations. Surplus production stemming from these new plantations was intended to reach 50,000 metric tons by 2020. However, structural problems

of access to capital, skills and infrastructure, in particular electricity, remain and have prevented cocoa growers from becoming competitive.

Growers' poor practices in cocoa-bean harvesting and drying, aggravated by poor road conditions, cause large losses of supplies and late deliveries for processors. Firms often organize awareness campaigns and workshops to train growers on best harvesting and drying practices. Some have introduced bonuses to encourage farmers to produce higher-quality beans.

The three firms show little interest in moving into higher value added activities, mainly because

FIGURE 4.16: RATING OF LOCAL AND FOREIGN SUPPLIERS RELATIVE TO LEAD-FIRM EXPECTATIONS IN CAMEROON'S COCOA INDUSTRY

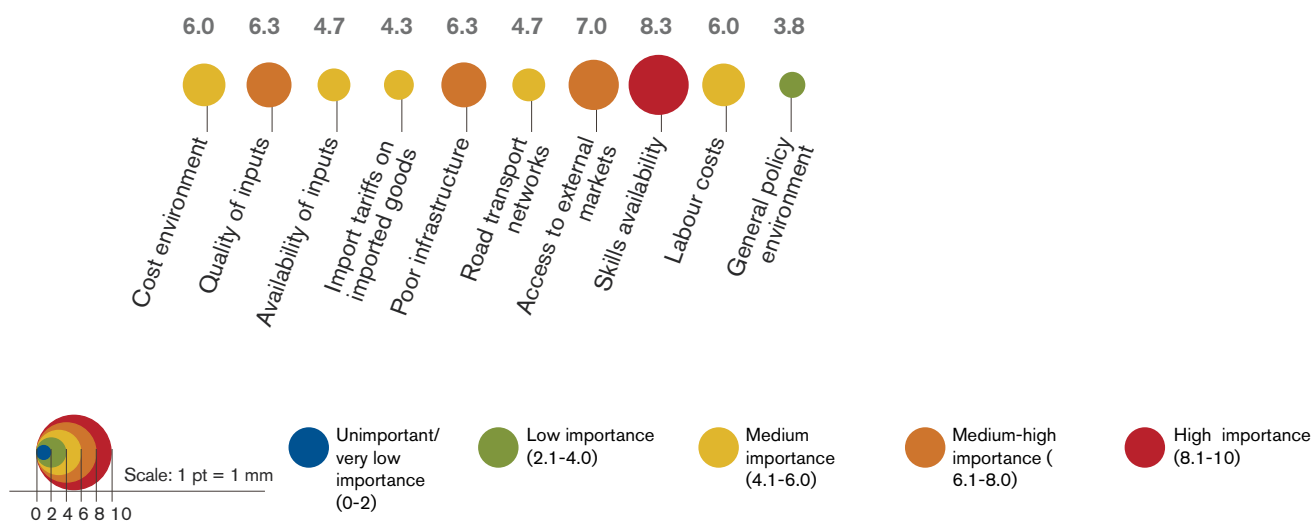


Source: Interviews with five processing firms, 2012.

of supply chain bottlenecks. SIC Cacaos has produced the same semi-finished products for several years, although the two smaller firms are diversifying into detergent, potash and biogas,

and cocoa by-products (alkaloid used in wine production). Any upgrading strategy is constrained by access to skills, external markets and infrastructure (figure 4.17).

FIGURE 4.17 RATING OF FACTORS AFFECTING LINKAGE DEVELOPMENT IN CAMEROON'S COCOA INDUSTRY



Source: Interviews with three processing firms, 2012.

Cameroon has no linkage development strategy for cocoa. The government has developed a Support Programme for the Creation and Development of Small and Medium-sized Enterprises in processing and preserving local products of mass consumption. But according to the surveyed firms, such government support has been largely ineffective. The challenge for the Cameroon policy framework lies mainly in institutional arrangements, with too many ministries, bodies and laws involved in developing small and medium-sized enterprises.

Implementation capacity is also low, and red tape is a drawback in applying laws and regulations, and in accessing finance under government schemes

(one of the companies has been waiting for financing for nearly three years). As a result, local processing activities receive very little support to expand capacity and raise their value added. This is particularly problematic because, unlike Ghana and Nigeria, Cameroon has not seen investment in its processing capabilities from international or domestic companies. Given the weakness of domestic processing, government support is critical if Cameroon is to attract investment and build domestic competitiveness.

A three-country cocoa comparison

The cocoa value chains and linkage development of the three countries are summarized in table 4.1

TABLE 4.1: SUMMARY COMPARISON OF COCOA VALUE CHAINS AND LINKAGE DEVELOPMENT: NIGERIA, GHANA AND CAMEROON

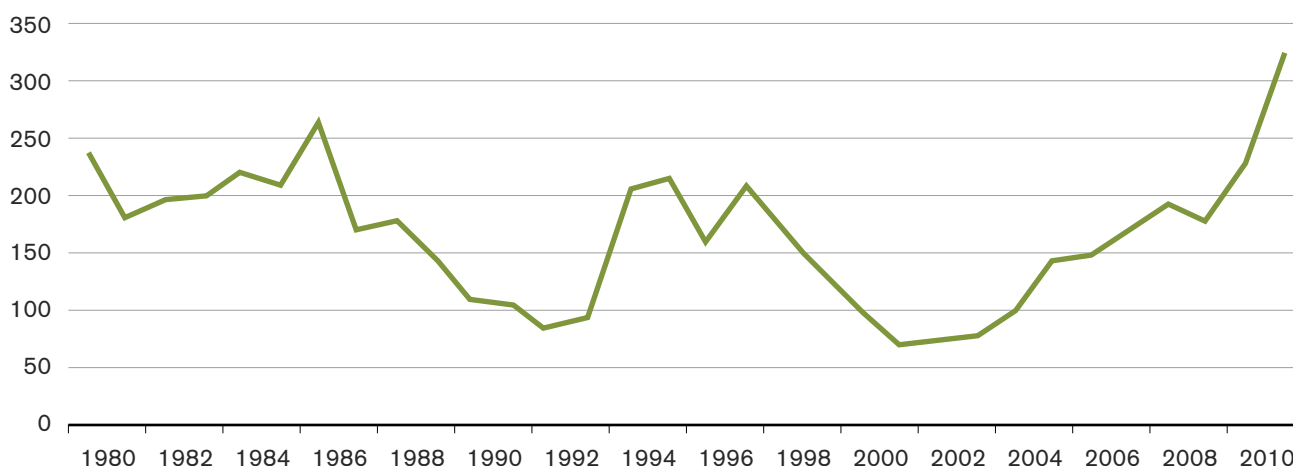
Nigeria	Ghana	Cameroon
<i>Forward integration into final and intermediate GVC stages</i>	<i>Growing forward integration into intermediate stages of the GVC</i>	<i>Static—no upgrading and no linkage development</i>
<ul style="list-style-type: none"> ▪ Domestic/foreign capital ▪ Intermediate/final products ▪ Regional markets ▪ CSFs: quality, lead times, trust ▪ Weak buyer cooperation ▪ Constraints: raw materials, capital, infrastructure, EU trade regime and horizontal policies for processors 	<ul style="list-style-type: none"> ▪ Domestic/foreign capital ▪ Intermediate products ▪ EU buyers ▪ CSFs: quality, price, trust ▪ Cooperation with buyers ▪ Strong government policies on raw materials ▪ Constraints: capital, infrastructure, cost environment and policies for growers 	<ul style="list-style-type: none"> ▪ Domestic/foreign capital ▪ One chocolate manufacturer vs. Asian competition ▪ Intermediate products ▪ EU buyers ▪ CSFs: trust, lead times, quality ▪ Constraints: raw materials, skills, markets, cost environment and weak policies

4.2 COFFEE

Long-term price trends

Coffee is a major source of foreign exchange and jobs in many African countries. From the mid-

1980s, world prices declined, bottomed in 1992, spiked in the mid-1990s, fell again until the early 2000s, and then picked up strongly (figure 4.18). In real terms, however, prices in the mid-2000s were still only half those of the 1960s (Kaplinsky and Fitter, 2004).

FIGURE 4.18: COFFEE COMPOSITE INDICATOR PRICE OF THE INTERNATIONAL COFFEE ORGANIZATION, 1980–2011(US CENTS/LB)

Source: UNCTADStat, retrieved from <http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx> (accessed 20 October 2012).

Several factors underlay the declining price trend. A major factor was the end of International Coffee Agreements, which, until the 1980s, enabled producing countries to support and stabilize world prices through quota arrangements (Ponte, 2002b; Talbot, 1997b). The entry of Vietnam as a large producer of low-quality Robusta coffee contributed to an oversupply in the 1990s.

As part of structural adjustment programmes, most coffee marketing boards were dismantled, which led to higher shares of domestic income accruing to growers, but also to higher exposure to price volatility. This coincided with the substantial withdrawal of the state from extension and quality control services. As

a result, while export volumes generally increased, quality generally suffered. In Africa, institutional reforms varied widely. Whereas Uganda's liberalized market, for example, made it a large supplier of quite low-quality coffee in the 1980s and 1990s, Kenya's restrictive export regulations helped it to maintain its reputation as a supplier of fine, albeit inconsistent, coffee (Ponte, 2002a).

Coffee prices have risen strongly since the early 2000s (see figure 4.18), following agricultural commodities. They have been affected by poor harvests of high-grade Arabica producers (box 4.4), such as Brazil and Colombia, combined with sustained demand in emerging markets.

BOX 4.4: COFFEE QUALITIES

The International Coffee Organization classifies coffee as follows, by price: Mild Arabica (Colombia, Kenya, Tanzania), Brazilian Naturals, or Hard Arabica (Brazil, Ethiopia), and Robustas (Vietnam, Côte d'Ivoire, Uganda).

Some African countries are important global suppliers of specific coffees. Côte d'Ivoire and Uganda are high-volume suppliers of Robusta, and Ethiopia and Kenya are high-quality suppliers of Arabica.

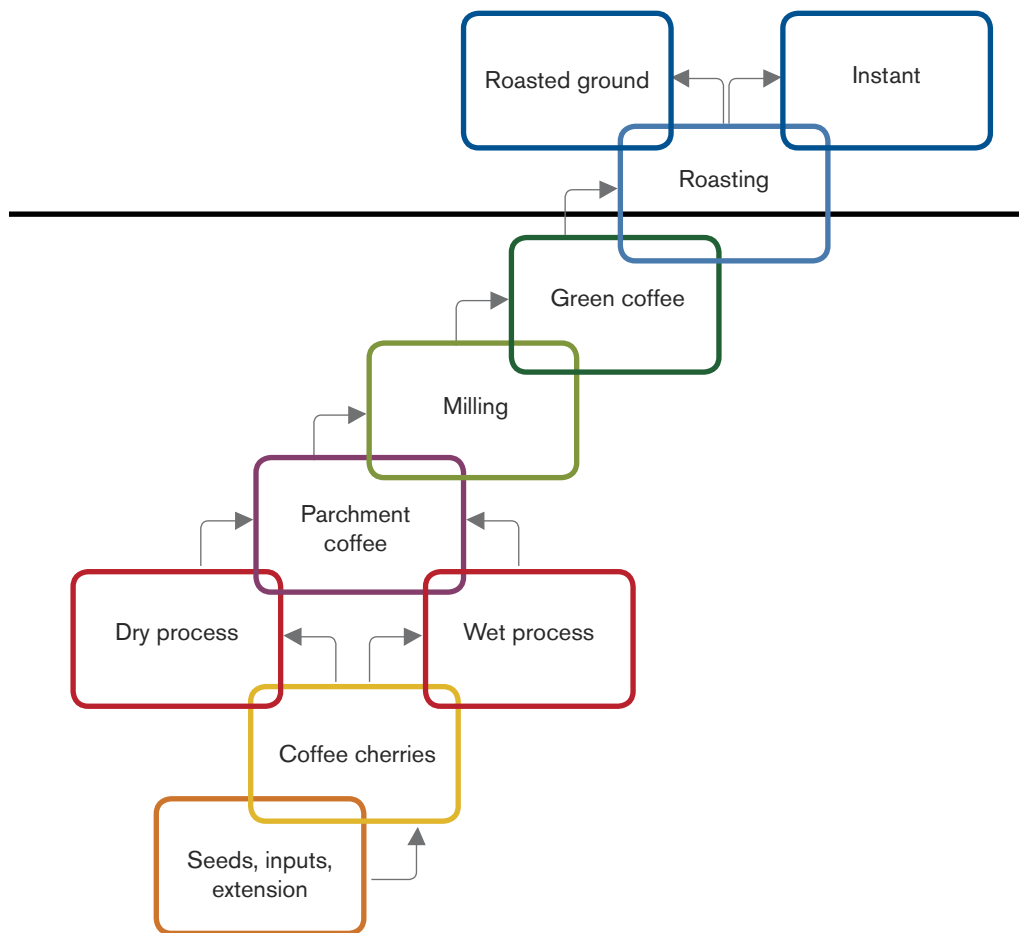
Sources: Petit, 2007; Ponte, 2002a.

The global value chain

After harvesting, coffee beans need to be processed within 24 hours. Post-harvest processing can be done on a small scale by farmers themselves and can take the form of dry method (cherries are dried and separated from the beans by threshing) or wet method (fresh pulp is

mechanically separated from the beans, and beans are fermented, rinsed and dried). Both dry and wet methods produce parchment coffee, which requires milling to remove the coffee coat, producing less bulky green beans. Further processing consists only of roasting/grinding and, for instant coffee, brewing and spray or freeze-drying processing (figure 4.19).

FIGURE 4.19: COFFEE GLOBAL VALUE CHAIN



Source: ECA and AUC.

Market concentration

The demise of international and national institutional frameworks has made private firms lead players in the coffee GVC. Forward linkages are controlled by a few international traders, roasters and retailers, which during the 1990s acquired high market concentration.

Roasters are the key drivers of the GVC (Ponte, 2002b). They set the market parameters for growers, processors and domestic traders in producing countries, and for international traders. Retailing is controlled by supermarkets, but roasters command the larger profit margins. Rather than pursuing vertical integration, roasters focus on their core business: product development, R&D and marketing. In order to shed non-core activities and overheads, they have moved to supplier-managed inventory, which requires international traders to manage stocks of varying volumes, quality and origin to be supplied just in time, which has induced international traders to integrate backward into coffee-producing countries. Liberalized coffee marketing in these countries has encouraged the process, and many capital-starved domestic traders have been partly or entirely acquired by international traders.

The power of roasters has been reinforced by innovations in coffee-processing technology (Ponte, 2002b). New washing techniques enable them to blend different varieties of coffee to create a certain flavour, increasing roasters' flexibility in their sourcing strategies, reducing their dependence on specific sources and qualities, minimizing the risk of shortages and price variations, and enhancing their ability to combine supplies of varying qualities and prices (Kaplinsky and Fitter, 2004). This has weakened producers' bargaining over prices and volumes.

Coffee bar chains, such as Starbucks, have become major value chain players, revolutionizing coffee retailing (Ponte, 2002b). These retail points sell a "coffee experience" rather than just coffee, marketing coffee as a "positioning good" so that consumers pay not only for good coffee, but for the ambience and social cachet granted by being seen to drink coffee at these places. At these

outlets, coffee represents less than 4 per cent of the final retail price.

Coffee demand is income elastic in that growing disposable income is associated with higher coffee consumption, but when income levels are high, it stabilizes (Ponte, 2002b). To counteract potential slumps in demand and respond to growing health, environmental and social concerns among consumers, roasters and retailers have cultivated fast-growing niche markets and created, for example, speciality, Fair Trade, organic and environmentally friendly coffees. A major retailer in the UK offered up to 96 varieties of coffee in the early 2000s (Kaplinsky and Fitter, 2004). Indeed, coffee has much potential for differentiation, and this is reflected in the price variance: in the UK market at that time, prices for 100 grams of roasted coffee varied from \$0.86 for basic products to \$2.40 for high-end espresso quality, to \$3.30 for single-origin coffee (Kaplinsky and Fitter, 2004). Roasters and retailers are also cultivating emerging markets such as China to tap into rising income groups.

Market concentration in forward linkages has led not only to higher entry barriers for new entrants but also to unequal distribution of income between producing and consuming countries (Kaplinsky, 2004). Until the mid-2000s, while coffee growers in producing countries saw their farm gate prices collapse, retailers in consuming countries faced fairly stable revenues. Roasters and retailers may well control, respectively, up to 30 per cent and 20 per cent of total value added in the coffee GVC (Kaplinsky and Fitter, 2004).

In producing countries, declining world coffee prices in the 1990s and 2000s hurt coffee growers' income, and through that, exacerbated rural poverty, prompting calls for global interventions by, for example, re-establishing international quantitative restrictions among producing countries. This approach is complicated by its reliance on coordination among major world producers and is embedded in fraught political and economic negotiations. Another approach is generally considered more feasible because it is formulated nationally—local upgrading to increase income levels, if not shares in the GVC.

Coffee-producing countries can follow essentially two types of upgrading strategy: process and product, and functional. The first aims to produce higher-quality coffee or different types of coffee (Fair Trade, organic) in order to lift growers' prices. In other words, producing countries maximize the revenues associated with their current position in the GVC. The second aims to move beyond green bean exports, by acquiring processing, marketing and distribution capabilities that involve not only growers, but also food manufacturers and service providers.

Process and product upgrading

For roasters, quality consistency represents a key market parameter, because inconsistency forces them to adjust processing equipment and procedures (Fold and Ponte, 2008). Hence, they value consistency as much as quality. The final

quality of coffee depends as much on bean types as on farming practices and primary processing (drying, washing and storage). Process upgrading therefore requires investment in extension services to farmers, capacity building for processing, transport and storage, and domestic quality control systems. Process and product upgrading underlies some companies' success in catering to the top end market, as they focus on growing practices, bean selection, handling and transport, roasting and packing (Kaplinsky and Fitter, 2004). There is ample room for African countries to develop upgrading strategies for farming and harvesting links because these links present low technological barriers to entry.

Product differentiation enables producing countries to target fast-growing niche markets, but presents some challenges as its economic benefits are not always clear-cut, and it often raises entry barriers for smallholders (box 4.5).

BOX 4.5: PRODUCT DIFFERENTIATION IN THE COFFEE GVC

Speciality coffee, in particular single-origin coffee, offers important opportunities to raise growers' revenues. For example, Jamaican Blue Mountain coffee has often sold at five times the world coffee price at some point, and has not been vulnerable to world price fluctuations (Kaplinsky and Fitter, 2004). Moving into speciality coffees requires producing countries to invest at both production and at marketing stages. The latter includes building consumer awareness on coffee quality, promoting a product image in consuming countries, and seizing the opportunity of geographical indication marks, as with wine producers (Ponte, 2002b).

For Fair Trade, organic and environmentally friendly coffee, the benefits are less straightforward. First, not all these niche markets offer market premiums. While Fair Trade enables growers to secure higher economic returns, the premiums on organic and environmental certification are more flexible, often set by market (and non-market) factors (Ponte, 2002c; Muradian and Pelupessy, 2005). Even Fair Trade coffee is hampered by inconsistent quality and excessively high prices.

Second, certification costs can throw up significant entry barriers for African producers in particular, given the proliferation of certification schemes that often differ by country and retailer, offsetting price premiums.

Third, some certifications such as Rainforest Alliance are so widespread in mainstream retailing that they are becoming "order qualifying" rather than "order winning" market requirements—a necessary, but not sufficient, condition—leading to higher production costs for coffee growers without commensurate economic benefits.

Functional upgrading

The coffee value chain offers two different opportunities in functional upgrading—roasted coffee and instant coffee.

Roasted coffee usually needs to be processed near a consumption point to preserve its flavour, which explains why international trade has traditionally taken place in green bean form. Vacuum packing enables it to preserve the flavour for a slightly longer period, but also increases transport costs (Roemer, 1979). That would also require producing companies to supply within a very short delivery time, and have access to inputs and

knowledge to blend different coffee types suitable for packed roasted coffee.

Global roasters have a key competitive advantage in processed coffee products for several reasons: they can blend beans sourced from suppliers around the globe to meet their quality and price specifications, have manufacturing capabilities near the consumption point, control multiple brands and have excellent access to distribution networks.

The instant coffee value chain, however, presents issues for upgrading (box 4.6), suggesting that the opportunities for functional upgrading in speciality roasted coffee could be greater.

BOX 4.6: FUNCTIONAL UPGRADING IN THE INSTANT COFFEE GVC

Instant coffee was introduced during World War II in the US, and usually accounts for around 20 per cent of the world market by value.

This value chain is controlled by global roasters with strong market presence in both traditional and emerging markets. Similarly to the roasted ground-coffee market, global roasters differentiate their products by developing new blends and brands. Further, they have also expanded their product range by introducing coffee granules and freeze-dried coffee. The strategy's success is confirmed by large price premiums for high-quality and speciality instant coffee (Kaplinsky and Fitter, 2004).

After the war, some Latin American countries tried to move into processing and exporting instant coffee (Talbot, 1997a). These efforts were fairly successful and were usually supported by governments through financial incentives, access to lower-quality coffee beans and marketing.

Moving into instant coffee production has not, though, always translated into a revenue leap from exporting green beans (Talbot, 2002). This is because Latin American instant coffee manufacturers sold mainly in bulk to global TNCs that marketed it under their own brands. In other words, while successful in developing a manufacturing base, these countries did not secure a larger share of the overall revenues in the instant coffee GVC. Only when exporting under their own brands to emerging markets have they achieved higher profit margins.

In Africa, domestic and regional markets are very small, apart from countries where coffee consumption is part of the culture, like Ethiopia and Eritrea, or is associated with rising incomes, like South Africa. International markets therefore remain crucial, and targeting them requires access to high-quality beans (single-origin, for example) and competing with the

global roasters that control brands for niche markets. Two proposals to enter the high-value coffee market at the roasted stage include deepening the level of processing of Fair Trade coffee, and moving into non-household distribution through speciality coffee bars (Muradian and Pelupessy, 2005).

Ethiopia's coffee industry

Coffee, Ethiopia's largest export, accounts for 10 per cent of GDP. Coffee production involves 1.3 million small farmers, but with dependants and employees in ancillary industries supports an estimated 15 million people (Petit, 2007).

In the 1990s, the institutional framework was partly liberalized. Private and growers' cooperatives now participate in primary processing and domestic marketing. However, vertical integration is limited and export marketing is controlled by the Ethiopian Commodity Exchange (ECX), a government body responsible for auctioning coffee. The ECX aims to retain high standards for Ethiopia's coffee, and ensures that consignments from different regions are kept separate to preserve their distinct flavours.

Since 2001, cooperative firms and some private companies have been allowed to export directly, bypassing the domestic marketing system, which nevertheless controls 80 per cent of coffee production. Coffee consignments that do not meet export standards are directed to the large domestic market, which absorbs 40 per cent of domestic coffee output. Ethiopia is the only coffee-producing country other than Brazil with a large domestic market.

Firms' perceptions

Coffee processing and exporting are very competitive, with around 200–250 firms involved. The case study covers 4 processing and exporting firms established after the 1990s' reforms. All firms are Ethiopian owned, although one of them operates in partnership with a TNC. Firm size is in the range of \$4 million–8 million turnover. Firms purchase coffee beans from the ECX, apart from a cooperative of coffee growers with \$46 million turnover. After receiving their beans from the ECX, exporting firms

wash, cap, sort and grade, and make logistical arrangements. Some are involved in roasting, a more labour-intensive stage. Employment consists mainly of unskilled casual workers.

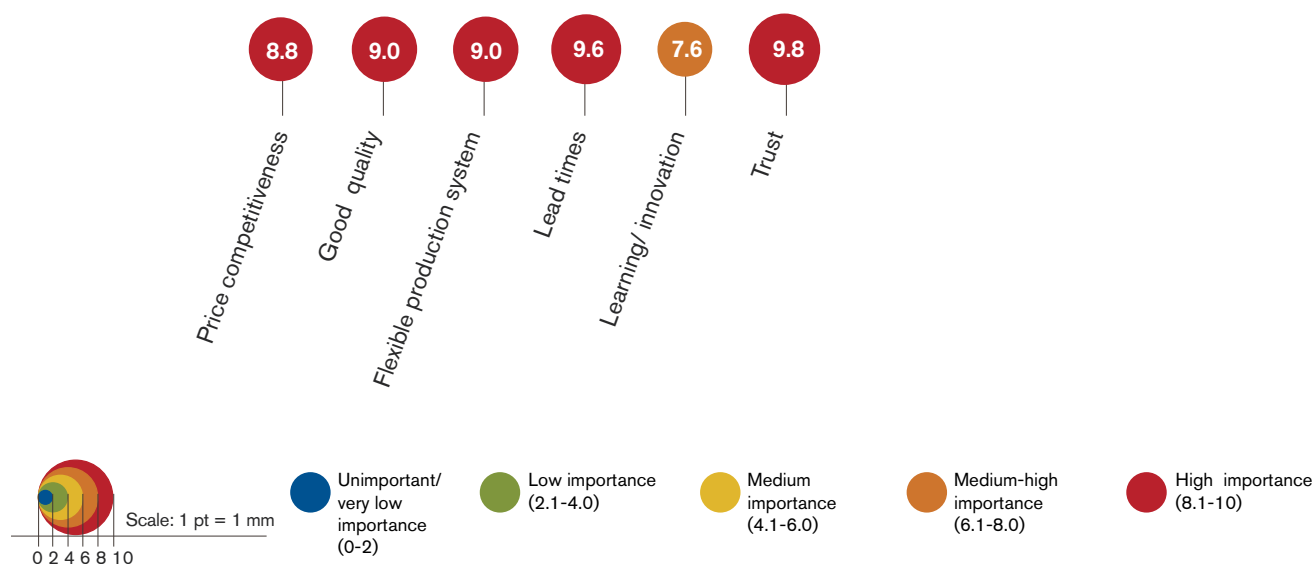
Coffee-exporting firms sell 85–95 per cent of their output to international traders. For some firms, traditional markets are still prominent: the EU (60–95 per cent of total sales), where demand is growing, and to a lesser extent the US (20 per cent) and Japan (5–10 per cent), a declining market. Other firms have more differentiated markets: the Middle East, the Republic of Korea, Australia, New Zealand and South Africa. The export markets are segmented by speciality and undifferentiated coffee.

Except for the Middle East, these markets are very demanding in terms of trust, quality, price competitiveness and lead times (figure 4.20). International competition is stiff, as Ethiopian exporters are running against high-quality coffee from Brazil and Colombia. Surveyed firms report that buyers assist them to some extent with capability to monitor quality and grade coffee beans.

Coffee-exporting firms are willing to invest in developing in-house roasting capabilities, but buyers are not generally interested in semi-processed products, as it would encroach on the core business of the final industrial user, the global grinders. Coffee-exporting firms also contemplate expanding their market size and branching into new products.

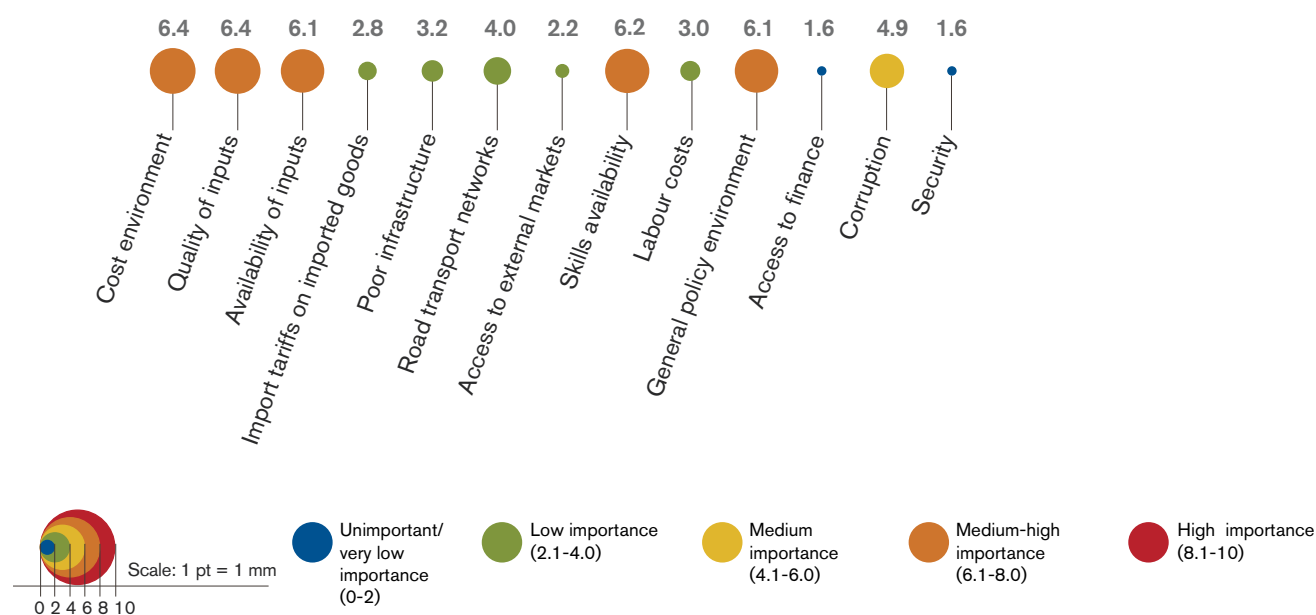
At the domestic level, the challenges to local processing capabilities are twofold (figure 4.21). Access to inputs is problematic: some are unavailable, and firms would, for example, need to invest in in-house packaging if they were to export packed, roasted coffee. Also, the quality of raw materials is low. Nor is the government framework supportive: high taxes, lack of skilled labour and, to a lesser extent, corruption make it hard for firms to invest in processing facilities.

FIGURE 4.20: BUYERS' CRITICAL SUCCESS FACTORS IN ETHIOPIA'S COFFEE INDUSTRY



Source: Interviews with four processing and exporting firms, 2012.

FIGURE 4.21: RATING OF FACTORS AFFECTING LINKAGE DEVELOPMENT IN ETHIOPIA'S COFFEE INDUSTRY



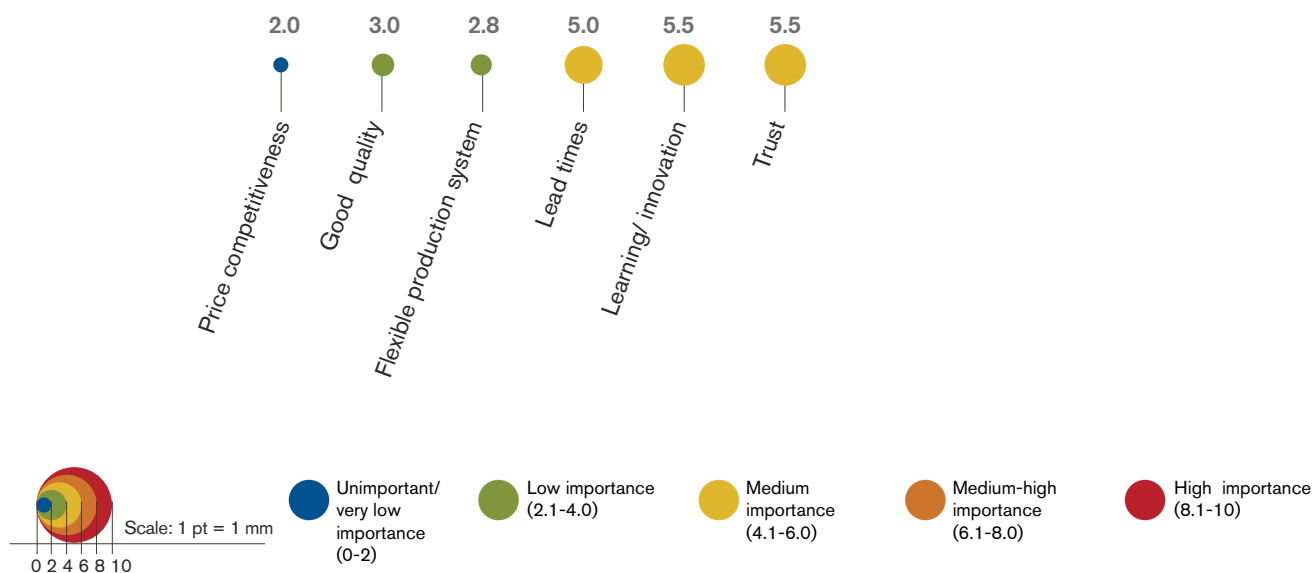
Source: Interviews with processing and exporting firms, 2012.

Exporting firms rate quality of supplies a key challenge, and are concerned at the capacity of ECX to improve the quality of beans supplied by farmers. The current system provides more incentives for fast turnover than high-quality output, although one firm argues that ECX is becoming more responsive to this problem (and is technologically advanced). But as the quality of beans is determined by the timing and handling of beans at harvesting and post-harvesting

stages, and as the exporters do not work directly with farmers, they cannot assist local farmers to upgrade their capabilities. Other issues include poor infrastructure, power cuts (one factory reported 35–40 per cent power outages) and poor telecoms.

Exporting firms' rating of local suppliers' capability is very low for quality, price and flexibility to match volumes or quality required (figure 4.22).

FIGURE 4.22: RATING OF LOCAL SUPPLIERS' PERFORMANCE IN ETHIOPIA'S COFFEE INDUSTRY



Source: Interviews with processing and exporting firms, 2012.

A growers' cooperative provides an exception. It exports speciality coffee to the US and other high-income countries in the Pacific region, and has to meet very high quality standards. It employs 113 permanent and more than 1,000 temporary workers. This firm has allocated staff to assist and train farmers and to cooperate with external facilitators. In its experience, these links have helped to build growers' capabilities in quality and costs. However, the firm's growth potential is constrained by lack of capital and weak government support.

Ethiopia's economic policy largely focuses on diversification. At the sectoral level, the Coffee Development and Marketing Plan targets farms' productivity, coffee quality, washed method post-harvest processing, and marketing. The government provides general incentives for local processing, such as tax-free capital imports, but the surveyed coffee processing and exporting firms found that these schemes were bogged down by burdensome procedures. They also highlighted policy inconsistency and scarce government willingness to cooperate with the private sector.

4.3 TEA

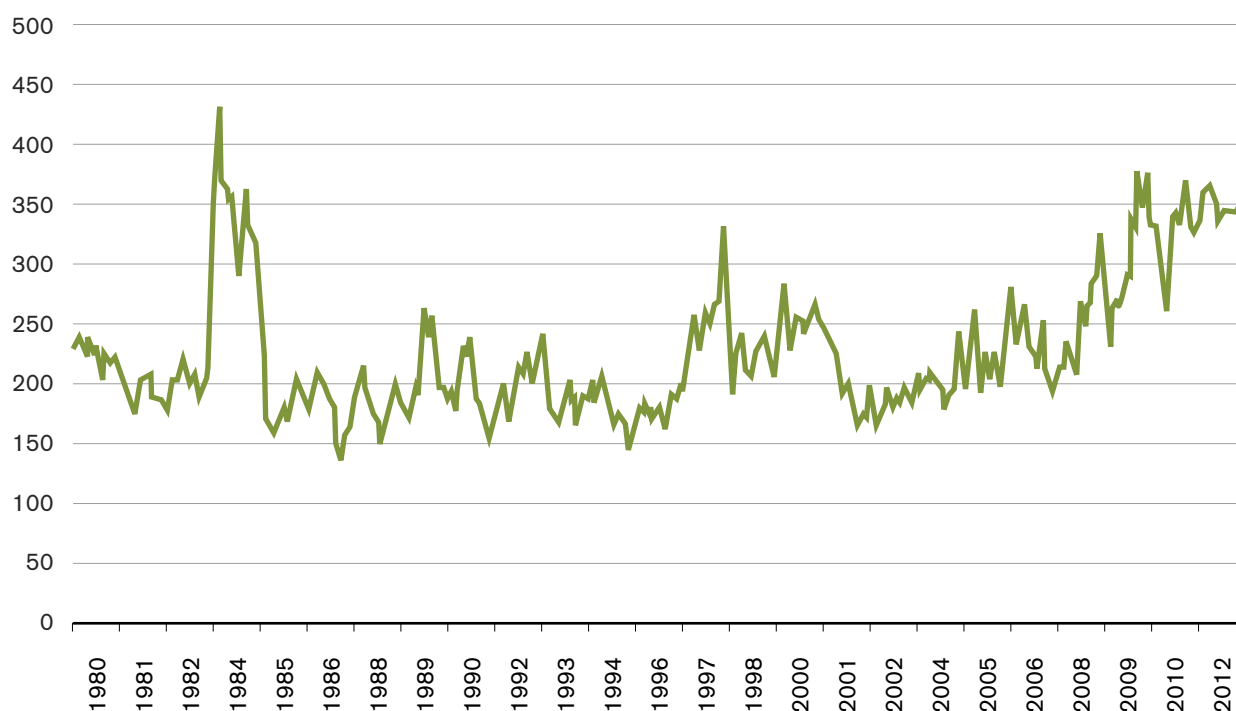
The global value chain

World tea prices were on a declining trend until the mid-2000s because of production expansion and productivity increases (Fold and Larsen, 2011; Ganewatta et al., 2005), but thereafter followed the general price surge of agricultural commodities (figure 4.23).

Tea requires processing within a fairly short time

of harvesting. Processing into green tea (a small part of the market only) is quite easy, as tea leaves are heated, then rolled or twisted, and finally dried. Black tea requires more complex processing: tea leaves are withered (or partly dried), and rolled up or cut, fermented, dried and eventually sorted by size (figure 4.24). This processing can be done through traditional processes for higher-quality loose teas, or through cut, tear and curl for bulk teas for tea bags. The result is packet tea or tea bags.

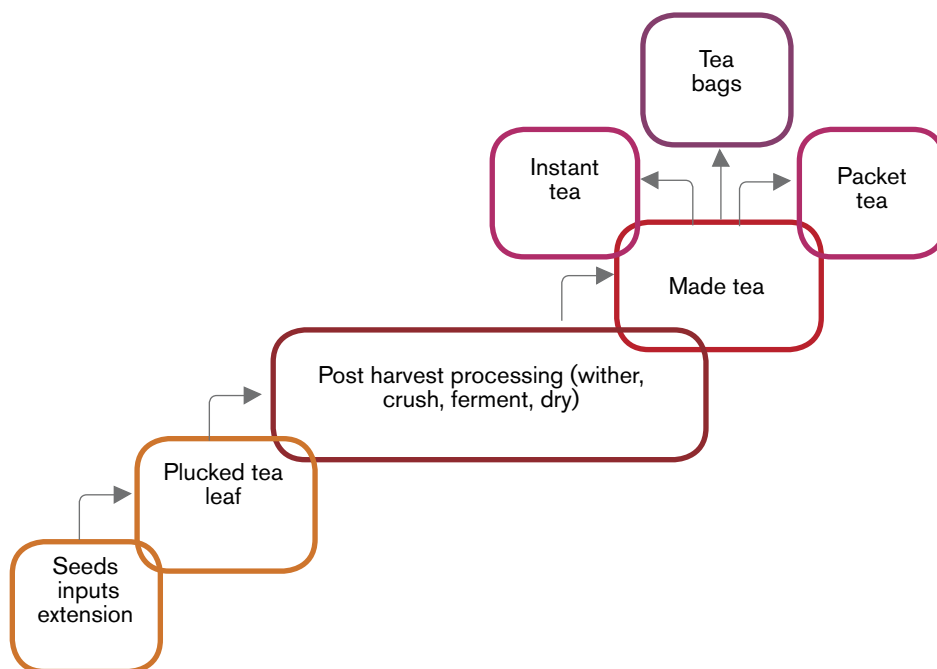
FIGURE 4.23: WORLD TEA PRICE, MOMBASA AUCTION PRICE, JANUARY 1980–SEPTEMBER 2012 (US CENTS/KG)



Source: IMF Primary Commodity Price monthly data, retrieved from www.imf.org/external/np/res/commod/index.aspx (accessed 18 October 2012).

Note: From July 1998, Kenya auctions, Best Pekoe Fannings. Before that: London auctions, CIF UK warehouses.

FIGURE 4.24: TEA GLOBAL VALUE CHAIN



Source: ECA and AUC.

Additional value can be added by packaging into smaller, branded retail packages, or packing into tea bags, instant tea and ready-to-drink beverages. The highest growth potential is in niche markets such as organic, flavoured or green teas. Teas marketed as products with high health benefits have been particularly successful.

TNCs such as Unilever and Tetley (now owned by Tata Tea; box 4.7) dominate marketing and distribution networks in consumer markets. Three companies control more than 80 per cent of the world market (World Bank, 2008). Unlike coffee and cocoa, tea TNCs are often vertically integrated and extend upstream into tea farming, partly because tea is frequently produced on large plantations (Kenya’s small production an exception). The relative capital and scale intensity required by post-harvest

processing also favours integrated companies. Similar to coffee and cocoa, however, the same tea TNCs have been under increasing pressure to comply with social sustainability standards (Fold and Larsen, 2011). The 1997 Ethical Tea Initiative brought together some of the largest TNCs in an effort to source from only approved tea producers in Kenya, Malawi, Tanzania, Zimbabwe and Asian countries.

In 2010, the world’s largest exporter was Kenya, which ranked third in global tea production (10 per cent). Other African producers, together accounting for 15 per cent of world output, were in descending order Rwanda, Zimbabwe, Malawi and Tanzania. China and India accounted for 34 per cent and 25 per cent of global production, mainly for their domestic markets (table 4.2).

BOX 4.7: AN EXAMPLE OF GRADUAL UPGRADING IN DOMESTIC, REGIONAL AND GLOBAL MARKETS

After independence, India extended its control over tea production and marketing by relocating tea auction centres to the country and partly shifting plantation ownership to Indian companies (Talbot, 2002). Tata Tea started as a joint venture with a British plantation, but was later under total control of the Tata Group. After investing in tea production, the company soon moved into packaging and instant tea manufacturing. Tata consolidated its presence in the domestic market and exported to ex-communist countries and regional markets, as well as expanding production into Sri Lanka.

In the 1990s, Tata Tea partnered with UK-based Tetley to manufacture tea bags for export and domestic consumption, which allowed it to absorb sophisticated production and marketing techniques. With the acquisition in 2002 of Tetley, Tata acquired a global brand name—number one in sales in the UK and Canada, and number two in the US—making it one of the lead firms in the tea GVC.

TABLE 4.2: GLOBAL TEA PRODUCTION, CONSUMPTION AND EXPORTS BY COUNTRY, 2006–2010

	2006		2007		2008		2009		2010	
	Quantity (million kg)	Growth (%)	Quantity (million kg)	Growth (%)	Quantity (million kg)	Growth (%)	Quantity (million kg)	Growth (%)	Quantity (million kg)	Growth (%)
Production										
China	1,028	10	1,166	13	1,200	3	1,359	13	1,475	9
India	956	1	945	-1	981	4	979	-0.2	966	-1
Kenya	312	-5	370	19	346	-6	314	-9	399	27
SriLanka	311	-2	305	-2	319	5	290	-9	331	14
Indonesia	140	-10	150	7	137	-9	136	-1	129	-5
Others	833	-4	860	3	882	3	854	-3	862	1
Total	3,580	4	3,796	6	3,865	2	3,932	2	4,162	6
Consumption										
World	3,491	4	3,611	3	3,717	3	3,824	3	3,980	4
Surplus										
World	89	-6	185	108	148	20	108	27	182	69
Exports										
Kenya	314	-10	344	10	383	11	342	-11	441	29
SriLanka	315	6	294	-7	297	1	280	-6	298	6
China	287	0.3	289	1	297	3	303	2	302	0
India	215	14	175	-19	200	14	195	-3	183	-6
Argentina	75	7	79	5	81	3	72	-11	106	47
Indonesia	95	-7	84	-12	96	14	92	-4	97	5
Others	277	-29	313	13	299	-4	296	-1	301	2
Total	1,578	2	1,578	0	1,653	5	1,580	-4	1,728	9

Source: Tea Board of Kenya: Annual Report 2010-2011; International Tea Committee, Annual Bulletin of Statistics, 2011 (<http://www.inttea.com/publications.asp>).

Note: Growth is relative to the previous year.

Kenya's tea industry

Tea has been produced on a commercial scale in Kenya for nearly 90 years. After independence, the tea strategy focused on smallholder production rather than forward linkages (Talbot, 2002). Today the sector is the largest source of foreign exchange. In 2011, almost 60 per cent of total production of 377,900 metric tons was controlled by smallholder growers (Republic of Kenya, 2012). They process and market tea through their own management body, Kenya Tea Development Agency. The sector has also attracted TNCs such as Unilever Tea (UK–Netherlands), James Finlay (UK), Williamson's Tea (UK) and Eastern Produce, Kenya (UK).

Kenya has a fairly well-developed agro-processing industry, with strong backward linkages to the agricultural sector (UNDP, 2005). These industries range from processing staple foods and fruits to producing beverages, vegetables, tea and coffee, and tobacco for the domestic and foreign markets. Most tea is exported in bulk form.

The four tea companies selected for Kenya's case study were established in the 1960s to 1980s. Formerly state-owned Kenya Tea Development Authority (KTDA) became a private company—and the largest tea firm—in 2000, and has a cooperative structure. Other tea companies interviewed are locally or East African owned, or are subsidiaries of TNCs. These subsidiaries are the main source of competition for the tea companies. All the surveyed firms are vertically integrated and grow, grade, process, blend and export tea. They import their machinery, and use local brokers and warehouses for marketing and storage. The sector is labour intensive, and each firm employs 4,200–5,700 workers. Processing is a more capital-intensive stage, and uses imported automated blending and packing equipment.

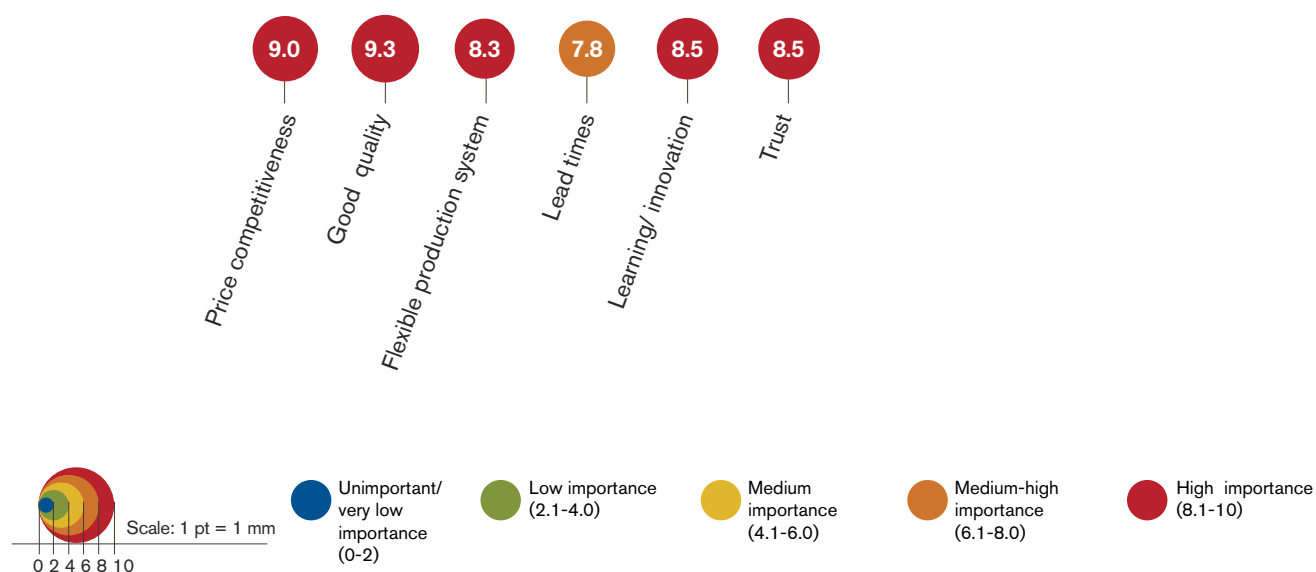
The export market is highly diversified. Supermarkets such as Tesco, Marks & Spencer and Sainsbury from the UK, and Albert Heijn from the Netherlands, are key buyers. Tea demand from the UK and the rest of Europe has been increasing, and Kenya's tea exporters have well established procedures to comply with their standards, and perceive pricing to be fair. Europe is by no means the only market, though: exports have diversified to China, India, the Middle East and North America. The domestic market takes 10–30 per cent of sales, and the regional market up to 20 per cent. Because exports are in bulk, the only variations in market requirements for exporters are quality and standards for the EU. The domestic market is easier to supply because quality is standardized and there are no trade barriers.

Firms' perceptions

The CSFs set by buyers are led by quality and price competitiveness (figure 4.25). Buyer–supplier cooperation is limited to information exchange, although some buyers send technical teams to assist exporters. KTDA operates at arm's length from its buyers.

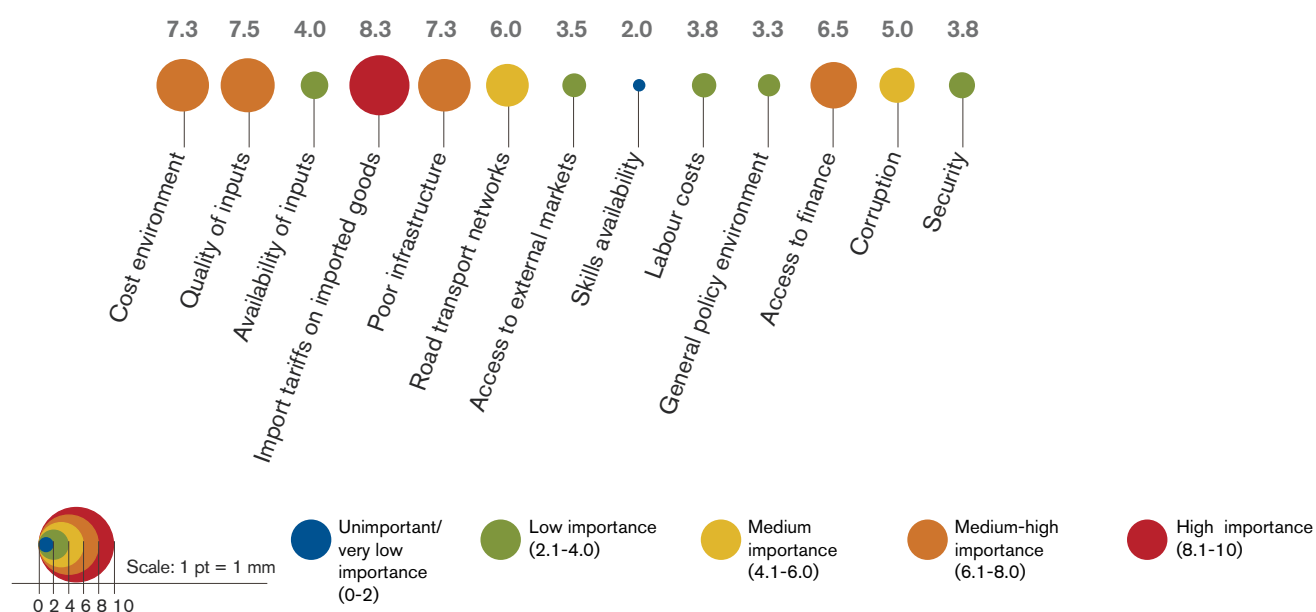
Tea companies identify their upgrading opportunities in value-added products such as tea extracts, flavoured teas, instant tea and ready-to-drink beverages. Some firms also want to diversify into timber, flowers, nuts and vegetables. One firm is moving to tea products that follow sustainable farming practices. Import tariffs on inputs, access to inputs (in particular land), access to finance, and taxes raise production costs; poor infrastructure, fluctuating electricity prices and availability, and poor telecoms hamper tight supplier–buyer linkages (figure 4.26).

FIGURE 4.25: BUYERS' CRITICAL SUCCESS FACTORS IN KENYA'S TEA INDUSTRY



Source: Interviews with four processing firms, 2012.

FIGURE 4.26 RATING OF FACTORS AFFECTING LINKAGE DEVELOPMENT IN KENYA'S TEA INDUSTRY

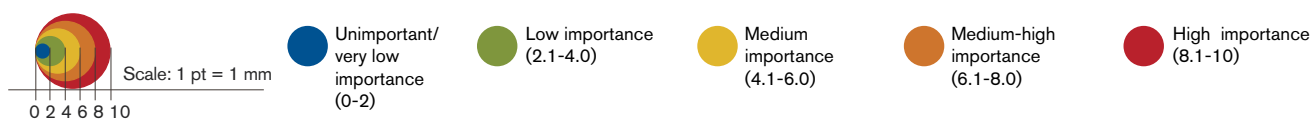
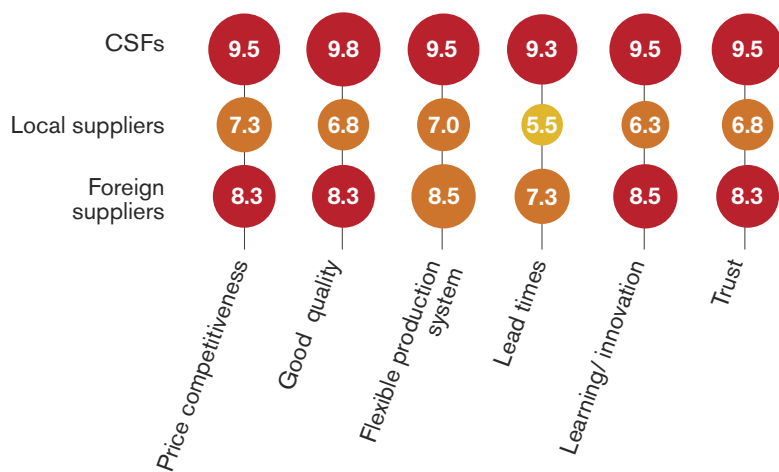


Source: Interviews with processing firms, 2012.

In addition, the supply chain has bottlenecks. Tea companies set demanding CSFs for their suppliers (figure 4.27), but local suppliers perform less well than foreign suppliers, particularly on lead times and learning/innovation, largely owing to

poor infrastructure and weak skills (per the tea companies). Some firms provide farm workers with inputs and technical services (allocating staff) and, KTDA particularly, cooperate with top growers in Kenya.

FIGURE 4.27: RATING OF LOCAL AND FOREIGN SUPPLIERS RELATIVE TO LEAD FIRMS' EXPECTATIONS KENYA'S TEA INDUSTRY



Source: Interviews with processing firms, 2012.

Limited linkage development

Kenya's auction centres market domestic tea and tea from other countries in the East African region, adding some value and facilitating intraregional trade. However, Kenya does not have an ambitious linkage development policy for tea (but does for fresh vegetables—see Kenya's fresh vegetable

industry below). It remains confined to exporting bulk tea and adds little value through, for example, packaging, blending, manufacturing ready-to-drink beverages or niche marketing, unlike Sri Lanka (box 4.8). The only applicable policy framework refers to improving the business environment in Vision 2030 which, to be well carried out, requires resources and expertise.

BOX 4.8: DEVELOPING FORWARD LINKAGES IN THE TEA GVC, SRI LANKA

Sri Lanka's upgrading efforts date back to the 1980s. It had to do something different because it had a small domestic market; productivity growth and expanded output had lifted global supplies of bulk tea considerably, pushing prices down; and global marketing and distribution were controlled by foreign companies.

The Export Development Board granted duty rebates and grants for exporters moving into higher value added tea products. In the early 1990s, Sri Lanka privatized its state plantations, most of which stayed controlled by domestic companies, some receiving foreign direct investment from Tata India (Talbot, 2002). The state encouraged forward integration, and set up a domestic auction centre.

Established in 1991, the Tea Board of Sri Lanka supported exporters moving up the value chain by giving tax-free incentives based on the previous year's incremental export value of teabags and tea packets, and by paying part of the interest on loans for capital investment in processing plants (Ganewatta et al., 2005). The Tea Promotion Bureau promoted tea in export markets and provided grants to firms exporting value-added products under national brands.

By value in 2011, Sri Lanka exported almost half its tea in value-added form and almost 3 per cent as speciality tea (green value-added tea). In short, the country has developed a high-quality export sector. Kenya, in contrast, exported almost its entire tea production in bulk form (box table).

BOX TABLE: COMPOSITION OF TEA EXPORTS FROM SRI LANKA AND KENYA, 2011 (%)

	Black tea in bulk	Black tea in value-added form	Green tea in value-added form	Green tea in value-added form
Sri Lanka	50.41	46.46	2.86	2.86
Kenya	98.98	0.12	0.05	0.05

Sources: Ganewatta et al., 2005; Talbot, 2002; ITC Trademap, retrieved from www.trademap.org/SelectionMenu.aspx (accessed 30 August 2012).

4.4 AGRO-PRODUCTS

The global value chain

Agro-processing is one of the most developed manufacturing sectors in Africa, and most countries are involved to varying degrees.

This subsection focuses on fresh—and processed—fruits and vegetables. Both offer export opportunities for African producers. Some countries have already inserted themselves into fresh-produce GVCs, such as Kenya (the case-study country), Egypt, South Africa, Zambia and Zimbabwe.

Dominance of supermarkets

Africa's fresh and processed fruit and vegetable exports have traditionally gone to Europe. Supermarkets continue to play a driving role in such value chains. In the 1990s, consolidation among EU retailers led to a few large supermarkets controlling most countries (with a few exceptions such as Italy and Spain). In the UK, for example, four supermarkets

have three quarters of the multiple grocery market (Barrientos and Asenso-Okyere, 2008).

EU supermarkets compete on product differentiation, advertising, investment in retail outlets and supply chain logistics (Dolan and Humphrey, 2000). Fresh fruits and vegetables are products of key strategic importance, first because supermarkets can easily sell under their own label, and second because fresh produce, with meat and wine, are determining factors in consumer choice of where to shop (Fold and Larsen, 2011). The key requirements for supermarkets are quality, consistency, variety and reliability of supplies (Dolan and Humphrey, 2000).

Much attention has focused on the role of regulatory barriers in accessing industrialized countries' GVCs for food products. Their retailers, importers and manufacturers must comply with strict food safety regulations, sanitary and phytosanitary measures, and technical regulations set nationally, regionally and globally. The UK 1990 Food and Safety Act, for example, imposes strict traceability requirements on retailers.

Supermarkets have developed firm-specific private standards to differentiate their products (Ouma, 2010). They have codes of conduct for suppliers that allow them to develop “credence goods” that meet consumers’ concern for social and environmental sustainability. Some standards have become public, such as GlobalGap (formerly EuroGap), a private standard that is now a minimum requirement for the EU market.

To monitor suppliers’ compliance, supermarkets, importers and exporters have set up systems of monitoring and auditing of farming practices (pesticide and fertilizer use, spraying, personal hygiene, etc.) and post-harvest practices (cold chain, handling, transport and the like).

For African smallholders it has become harder to stay in supermarket-driven value chains (Ouma, 2010), although they still find market access to lower-quality market segments driven by traditional wholesalers and catering companies. These markets are significant, though declining, in the North, but are large in Eastern Europe, Russia, Latin America and Asia, which are fast-growing importers of fruits and vegetables (Fold and Larsen, 2011). China’s impact is twofold: it is becoming a large importer of fruits, but is also a major exporter of agro-processed products.

Traditionally, emerging economies have been characterized by lower requirements for quality and certification than Northern markets (Fold and Larsen, 2011). However, supermarkets from Europe and North America have expanded their market share in these economies’ retail sectors, including Carrefour (France) and Walmart (US) in China and Metro (Germany) in Russia. Often they carry with them their supply chains: Walmart sources avocado, pears and grapes from Mexico and citrus fruits from South Africa for China. This trend could see higher market requirements applied to emerging economies too, including Africa.

In the value chain for fresh and processed fruits, TNCs play a major role, working alongside and in competition with supermarkets (Fold and Larsen, 2011). Branded manufacturers, such as Del Monte and Chiquita, are vertically integrated operations and focus on lowering costs and increasing margins

by targeting new countries as a source of produce and as markets, and by increasing economies of scale. Supermarkets, in contrast, aim to retail a growing share of fresh and processed fruit under their own label. By doing so, they diversify their supply sources and increase profit margins.

Upgrading opportunities

All these trends offer African agro-processing industries upgrading opportunities. Local industries can add value by deepening processing activities (washing or chopping), combining products (mixed washed, peeled, and chopped vegetables, ready for cooking) and packaging (for speciality products; Dolan and Humphrey, 2000). These new products are important for supermarkets and branded manufacturers because they allow them to reformat traditional products in high-income markets (Fold and Larsen, 2011). Many retailers in Europe have favoured relocating processing to Africa because it reduces labour costs, reduces wastage and increases the value-to-volume ratio.

For fruit-processing firms in Africa, the challenge is as much about increasing competitiveness (intra-firm and in the production chain) and introducing new products as moving up the value chain (Kaplan and Kaplinsky, 1999). Movement to control global brands and access retail sectors is particularly difficult.

Another set of opportunities is linked to market differentiation. Emerging markets in Asia and Central and Eastern Europe, as well as domestic and regional markets, offer the opportunity for African agro-processing industries to supply products that meet different price and quality specifications, and to move into higher value added products. In particular, regional value chains feeding into regional African markets can play an important interim guidance role for firms as companies seek to meet the requirements of US and European consumer markets. Local firms can test their products in less demanding regional markets, establish brand names and make the changes to shift to another level.

Opportunities for regional value chains are increasing for three main reasons. The rapid economic growth of many African countries based

on the commodities boom has expanded the number of middle- and high-income consumers, shifting consumption patterns and personal tastes to processed food and beverages.

In addition, the expansion of South African retail and supermarket chains into the rest of the continent is creating shelf space for these consumers to satisfy their new tastes. The supermarkets in South Africa already import processed and packaged fresh and semi-processed food from elsewhere in Southern Africa. As they move into East and West Africa they will be seeking new local sources of supply.

Finally, global retail chains are increasingly casting their eyes on African markets as a potential place to sell their wares: witness the entry of Walmart to South Africa, part of its strategy to launch into other African markets. African governments and regional trade groupings have ample opportunity to encourage local sourcing when these global players enter Africa.

Kenya's fresh vegetable industry

Until the 1960s, Kenya's fruit and vegetable industry had slow growth and was, in the main, domestically oriented. In 1967 the government established the Horticultural Crops Development Authority to expand the horticultural subsector (defined as production of fruits, vegetables and flowers), which in the following decades developed fairly free from government oversight. It has quite easy entry conditions for agribusiness enterprises, easy access to land, effective technological transfer and well-developed marketing linkages to European distributors and retailers. Today, horticulture is a major contributor to foreign exchange and employment.

Kenya's horticultural subsector employs around 4.5 million people countrywide directly in production, processing and marketing, and another 3.5 million people benefit indirectly through trade and other activities (Republic of Kenya, 2010). Cabbages, spinach, tomatoes, onions, chillies, pepper, carrots, French beans and Asian vegetables (karella, duhdi, brinjals) are some of the vegetables produced (ReSAKSS-ECA, 2010).

Opportunities for regional value chains are increasing for three main reasons. The rapid economic growth of many African countries based on the commodities boom has expanded the number of middle- and high-income consumers, shifting consumption patterns and personal tastes to processed food and beverages.

Smallholder farmers account for 70 per cent of horticultural output, but fewer than 20 per cent of them are involved in vegetable exports—75 per cent of that market is controlled by a few, large exporters (Basboga et al., 2010; Wiersinga and de Jager, 2007). This concentration of farming and exporting links reflects the organization required to meet quality standards, capital investment for post-harvest processing, and logistical capacity to supply goods just in time (Dolan and Humphrey, 2000).

The leading destinations for Kenya's horticultural exports were recently the UK (54 per cent), France (15 per cent) and Holland (11 per cent); (HCDA, 2009). Some companies have integrated with freight forwarding companies and with importing agencies in the UK, including Home grown (which accounts for 15 per cent of Kenyan horticulture exports) and Finlays Horticulture, both based in that country. Large exporters source fresh vegetables from their own farms, and their product lines are broader than small exporters. Their logistics are supported by a "pack house" next to the airport and their economies of scale help them to secure airfreight space. Home grown, for example, formed a joint venture with MK Airlines, which has a daily evening flight to the UK, ensuring reliable and timely deliveries and shipping-cost reductions (Dolan et al., 1999).

Firms' perceptions

The four companies exporting fresh vegetables in Kenya's case study were established between the 1970s and the 1980s. They are locally owned, large operations, in some cases subsidiaries of bigger groups. They have experienced strong growth in the past few years: in 2005–2011, one firm's turnover rose from \$60 million to \$210 million, another's from just more than \$10 million

to \$23 million. These firms are labour intensive, with a high proportion of female workers. In one firm, of 3,300 employees, two thirds are women. Workers have received training in areas such as food safety.

Most Kenyan vegetable firms have moved to higher value added products, such as ready-to-eat foods. Firms are involved in processing the raw materials, packaging, labelling, cold storage and exporting. Most are vertically integrated with farming, but also source from outgrowers. Some have to import supplies, such as packaging material from the UK because it meets EU technical regulations. Packaging and preprinted labels/bags are one area where local firms have expressed a desire to outsource to local suppliers.

The main export markets are UK supermarkets such as Tesco, Marks & Spencer, Sainsbury and Albert Heijn of the Netherlands. Kenyan companies compete with exporters from Egypt, South Africa and Zimbabwe. Some have diversified a little into other European markets and the US, and the Middle East and East Asia are also becoming more important. Firms exported 25–40 per cent of their output to non-UK markets.

Domestic sales are low, at less than 5 per cent of output, although one firm sells 20 per cent to domestic retailers and is planning to expand this market. Diversification forces exporters to meet markets' different requirements: EU markets have strict food safety regulations, but private standards are less relevant than in the UK; exporting to Middle Eastern markets is

competitive because of lower freight costs; and domestic markets have lower quality requirements.

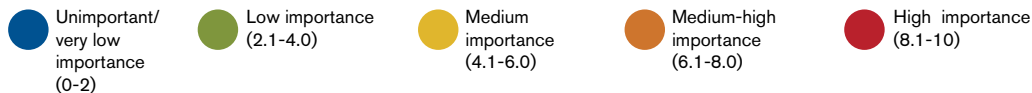
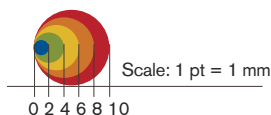
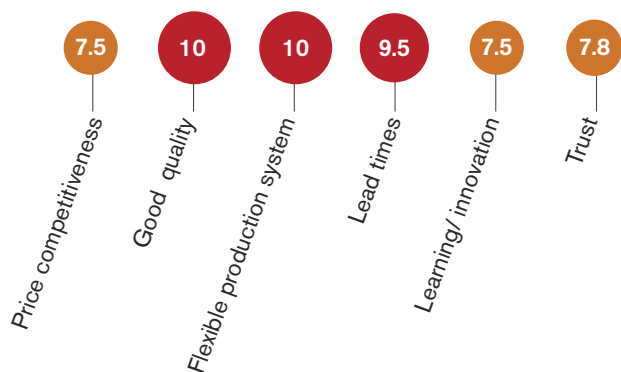
Most UK and other European buyers have supported relocation of processing to Kenya because of strong local capabilities to meet exacting market requirements.

Indeed, buyers' have demanding requirements for Kenyan firms (figure 4.28). They expect firms to supply just-in-time, high-quality products that meet volume and product specifications with very short lead times on the basis of consumption patterns. Thus buyer–supplier cooperation aimed at compliance with private and public standards is intense, in the form of information exchange and technical teams visiting exporters' premises, although not all firms benefit from these efforts.

Proliferating private standards are a serious challenge for Kenyan exporters, which have to face up 15 different standards, such as GlobalGap, Tesco's Nature Choice, Marks & Spencer's Field to Fork and Fair Trade (Ouma, 2010). The introduction of GlobalGap alone has increased monitoring costs for exporters by 30–40 per cent, causing a restructuring of the supply chain that consolidated the supply base to exclude smaller exporters and growers and that increased linkages among farmers, exporters and importers.

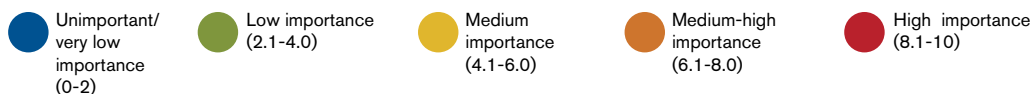
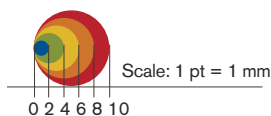
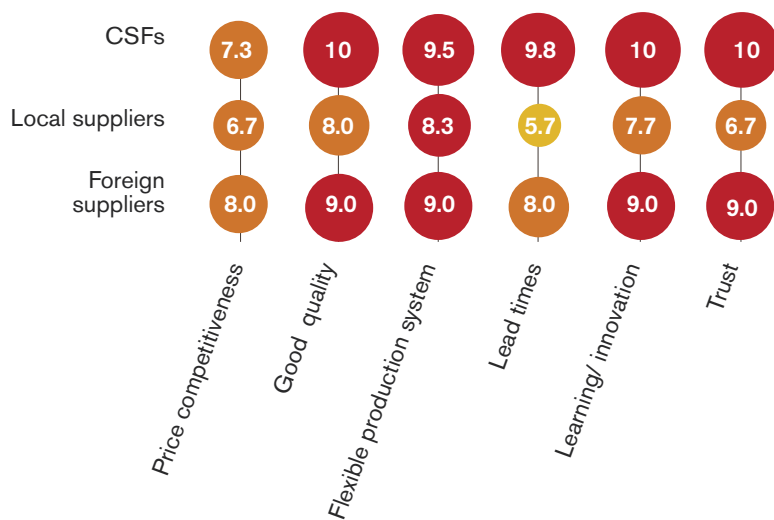
Vegetable-exporting firms reflect buyers' strict market parameters in their own supply chain, including quality, lead times and flexibility, but also trust and learning/innovation, with price secondary (figure 4.29). Local suppliers, however, fared quite poorly on lead time, trust and learning/innovation.

FIGURE 4.28: CRITICAL SUCCESS FACTORS IN KENYA'S FRESH VEGETABLE INDUSTRY



Source: Interviews with processing firms, 2012.

FIGURE 4.29: RATING OF LOCAL AND FOREIGN SUPPLIERS RELATIVE TO LEAD-FIRM EXPECTATIONS IN KENYA'S FRESH VEGETABLE INDUSTRY



Source: Interviews with five processing firms, 2012.

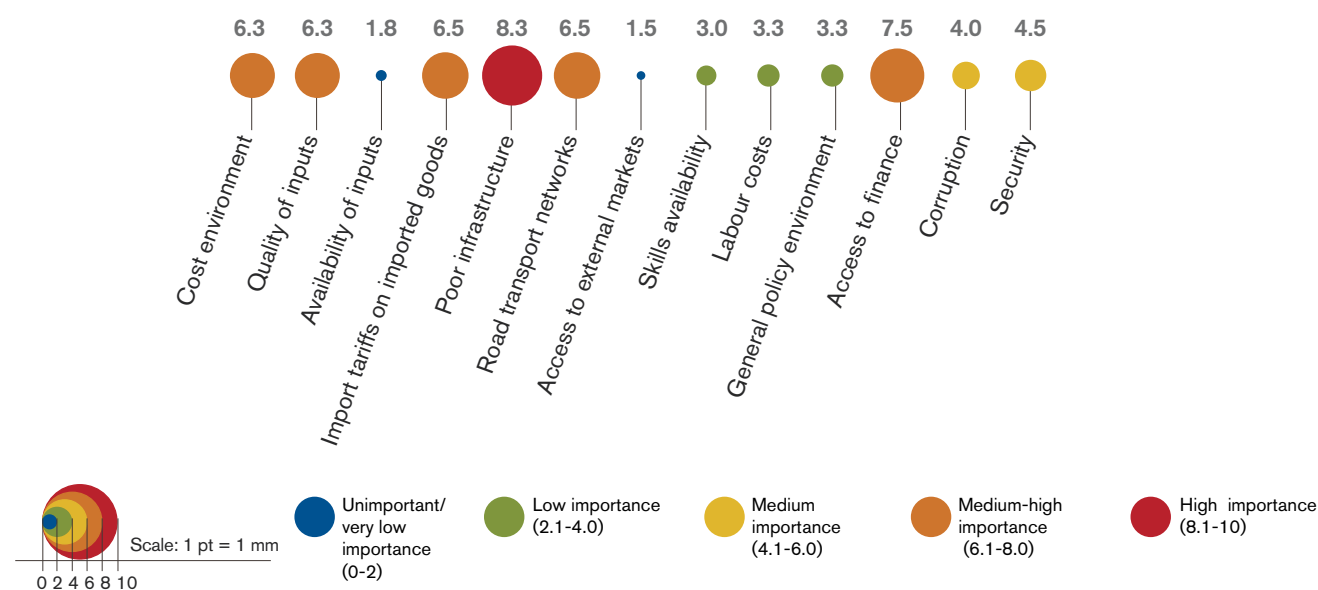
To build capabilities, processing firms allocate dedicated staff to farmers and provide them with inputs and technical services. They also cooperate with external domestic parties such as the Fresh Produce Exporters Association of Kenya, Kenya Plant Health Inspectorate Services, USAID and Techno serve, as well as GlobalGap and the British Retail Consortium. All surveyed firms report that these programmes have helped to improve suppliers' capabilities, especially on quality.

The main constraints to local procurement are poor transport infrastructure (which hampers movement of perishable products and delays consignments for flights); fluctuations, costs and availability of electricity; and access to finance. Security issues lead to higher production costs (security services) and farmers

cannot always work after dark. Corruption also raises production costs. Farmers in particular are affected by poor access to capital and skills, which makes it hard to meet standards as well as volume and quality requirements, which has a direct bearing on their sales.

The vegetable-exporting firms target process upgrading—for example, ensuring that labour practices meet high international standards or investing in technologies that give them the flexibility to process fresh produce following different product specifications. The firms also focus on product diversification, such as chillies, runner beans, avocados, herbs and tropical fruits. But process and product upgrading requires access to capital and economies of scale—the critical entry barriers (figure 4.30).

FIGURE 4.30: RATING OF FACTORS AFFECTING LINKAGE DEVELOPMENT IN KENYA'S FRESH VEGETABLE INDUSTRY



Source: Interviews with four processing firms, 2012.

Government policies and public-private cooperation

Several policies recognize value addition through processing. The Policy on Agro-industry for 2008–2012 aimed to scale up the operations of agro-processing firms by encouraging consolidation and establishing special zones and parks providing

improved, targeted export services. The Agriculture Sector Development Strategy 2010–2020 also supports processing industries, and the Ministry of Agriculture has targeted barriers to rural agro-processing, including licences, product standards, entrepreneurial skills, and high costs of equipment and packaging. The National Industrial Policy includes agro-processing among the sectors

to be supported through investment incentives and technical information, and supports farm research and clustering around specific agricultural resources.

Regulatory and facilitative roles in agro-industry are played by government bodies like the Horticultural Crops Development Authority, the Ministry of Trade and Industry and the Export Promotion Council, and by the private sector through the Kenya Association of Manufacturers and Fresh Produce Exporters Association of Kenya (which liaises with public and private sectors and with international organizations). It also provides export marketing information, post-harvest handling and packaging, and ensures adherence to established codes of practice.

Public–private collaboration has been critical for designing and implementing strategies to support local upgrading. Government support has been manifold: provision of subsidies has enabled firms to expand production, investment in infrastructure has reduced lead times of supplies, and support to farmers has enabled firms to reduce costs. Interviewed firms considered government assistance positive in having helped supply chain efficiency and compliance with standards.

However, the processing firms suggested that efforts should target non-EU market requirements, that the current interventions are too selective and fail to involve farmers in remote areas, and that the government should be more consistent in policy implementation. Most of these firms would respond to initiatives to work with the government or international bodies to support local processing.

However, processing firms surveyed suggested that efforts should target requirements of non-EU markets, that the current interventions are selective and do not involve farmers in remote areas, and that the government should be more consistent in policy implementation. Most of these firms would respond to initiatives to work with the government or international bodies to support local processing.

4.5 A VALUE CHAIN COMPARISON: ETHIOPIA AND KENYA

Table 4.3 outlines a country and value chain comparative overview between Ethiopia and Kenya

TABLE 4.3: SUMMARY COMPARISON: ETHIOPIA AND KENYA

Ethiopia (coffee)	Kenya (tea)	Kenya (fresh vegetables)
<p><i>Opportunity for upgrading: linkages seen but not grasped</i></p> <ul style="list-style-type: none"> High competition between exporters and processors Large domestic market/EU Marketing board inefficient CSFs: price, quality, trust, lead times Lead firms: some assistance, but not support for functional upgrading Constraints: access to inputs, skills <p><i>No specific policy on forward linkages</i></p>	<p><i>No upgrading in forward linkages</i></p> <ul style="list-style-type: none"> Dual structure Vertical integration Supermarkets, regional traders CSFs: price, quality Weak buyer cooperation Intense supplier cooperation Constraints: import tariffs, cost environment, land, finance <p><i>No specific policy on forward linkages</i></p>	<p><i>Forward linkage development, significant local upgrading</i></p> <ul style="list-style-type: none"> Large firms dominate Increased integration backward and forward EU supermarkets CSFs: Quality, product differentiation, lead times Strong buyer cooperation Good private–public cooperation Constraints: infrastructure, access to finance, sectoral policy

4.6 CONCLUSIONS

The case studies highlight that efforts to develop backward and forward linkages to soft commodities need to take into account the technical characteristics of the GVCs and the structure of the industry. These are important in determining the best strategies for local upgrading and for African firms to move into more profitable and more sustainable activities.

Government policies and local domestic capabilities are critical determinants. Policies

need to target the processing industries as well as the natural resource sectors. Improved coordination is also important in the private sector between farmers, growers, processors and exporters. Only such systemic competitiveness along the entire local value chain will enable firms to meet the requirements imposed by end markets for price, quality, standards and so forth. As domestic and regional markets are encouraging firms to move up the value chain in countries with higher capabilities, Africa's regional integration is therefore important to support and deepen such upgrading.

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NOTES

¹ The small sample size of some of the value chains in this and the next chapter requires us to be cautious when interpreting the data. However, we believe that we present a representative snapshot of the extent of backward and forward linkages and their determinants.

² Unlike output from the mineral and oil sectors, output from food commodity sectors can vary enormously in quality, price and specifications. This implies that the productivity, skills and technological capabilities at the commodity production stage have a critical impact on the volume, quality and price of inputs supplied to the processing industries.

³ These include Multitrex Plc, FTN Cocoa Processing Plc, Cadbury Nigeria Plc and Nestlé Plc.

⁴ Price competitiveness, good quality, flexible production system, lead times, capacity to learn and keep up with innovation ("Learning/innovation" in the charts) and trust.

⁵ Others are the Manufacture-In-Bond Scheme, Export Development Fund Scheme, Currency Retention Scheme, Tax Relief on Interest Income, Pioneer Status Scheme, Export Processing Zone, Buyback Arrangement and Capital Asset Depreciation Allowance.