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Identifying entry barriers for food processors to supermarkets in Kenya



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ABSTRACT

In Kenya, as in many other countries in the Global South, there is a growing population of so-called middle-income consumers that buy products from supermarkets. The increasing number of supermarkets in Kenya that serve these customers have become a potentially important market channel for domestic food processors. This paper identifies the barriers that domestic food processors encounter to accessing supermarkets within Kenya. It is based on survey data from 48 food processing firms that was collected in 2013–2014 and a set of two in-depth interviews conducted among selected firms in 2015 and 2016.

The findings indicate that it is difficult for processed food products from Kenyan-owned firms to enter the domestic 'modern' retail sector. A combination of stringent entry and markets barriers such as strict legal requirements and licenses, unfair competition, and lack of capital means it is an onerous task to survive in the presence of cutthroat competition from imported food products. The food processing firms interviewed often view the emerging supermarket sector as offering promising new outlets for their products but also point to a number of entry barriers, typically concerning resources and the qualification requirements of domestically owned supermarkets. These requirements are primarily related to pricing and payment terms that are difficult for most interviewed food processors to comply with. Other barriers include standardisation, regulations and infrastructure. An overreliance on the largest supermarket chains has led to harsh competition among Kenyan food processors. While some struggle for mere survival, others have to refocus on smaller supermarkets and convenience stores.

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Introduction

Food production, processing and distribution play an important role in sub-Saharan African economies. An increasing number of studies have explored the challenges for African food products in entering global chains and markets these industries. Entry barriers to global value chains (GVCs) for food suppliers are commonly seen as being on the rise, and as almost without limit (e.g., [6,14]). This paper focuses on domestic market sales of African-owned food processors in Kenya's

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fast-growing retail market. It deals with entry barriers that Kenyan food processors meet when attempting to reach market outlets. Though Kenyan middle-income consumers have been steadily rising in numbers, and a lucrative market thus exists, the paper shows how 'modern' retail formats are difficult to reach for domestic food processors. The paper identifies a number of entry barriers, such as capital requirements and standards compliance that affect domestic food processors' ability to sell to supermarkets.

The literature on modern food retailing is substantial. Yet, African countries have not been adequately covered despite the drastic changes in food retailing that some of these countries have witnessed and the growth of middle-income consumers who prefer to purchase food from modern food retailers ([27]:5). A vast amount of literature on the food retail sector has investigated the so-called supermarket revolution, including in the Global South [18,26,27,36]. The debates in this literature have, on the one hand, focused on rapid globalisation of retail itself [24,41,43]. On the other hand, the international sourcing strategies of 'global supermarkets', which are commonly identified as embracing increased requirements for suppliers – have been widely discussed (e.g., [7,8,14,30,31]). Empirical studies have often focused on retail in Europe and on suppliers of fresh food in African regions [27].

A number of challenges have been identified as barriers for African suppliers attempting to enter *global* value chains, driven by global supermarkets, into which global fresh food production and trade are structured [6,8,14,15]. While entry barriers for food suppliers are also the main concern of the present paper, with a focus on the case of Kenya, the paper differs from most of the existing literature and thus fills a research gap in at least two ways. First, it explores challenges for food suppliers locally, rather than in global chains, by identifying entry barriers for Kenyan food processors that attempt to sell their products domestically in a changing domestic retail landscape in which the 'modern' retail sector has grown steadily and taken retail share from other outlets, such as 'mom-and-pop' stores and street hawkers [2,29]. This represents a potentially important market for Kenyan food processors, underscored by the fact that Kenya is Africa's second largest market for 'formal' retail (after South Africa), mostly due to the country's growing middle class [3,9]. Second, our focus is on Kenyan food processing firms instead of fresh food suppliers, which have been subject to more research. Food processing represents a 'step up' the value chain and may thus be regarded as potentially important for economic development, diversification, and value added.

The paper is organised into five sections. The next section reviews both the theoretical and empirical literature. Section three presents the methodology upon which this paper is undertaken and section four presents the results. Finally, section five is the conclusion.

Literature review

This section presents the theoretical background on entry barriers for suppliers, and is based on the global value chain theory introduced by Gereffi and Korzeniewicz [12] as 'global commodity chains'. This theoretical approach describes how chains with several nodes in different localities are privately coordinated with the purpose of producing and trading finished goods. The literature on entry barriers for suppliers in the food sector is commonly based on the proposition that this sector is highly buyer-driven [11], with buyers mainly consisting of retailers such as supermarkets, hypermarkets and convenience stores. Gereffi and Korzeniewicz [12] very much formed the basis for the GVC approach by focusing on how chains consist of several nodes in different geographical locations. Within the supplier node of the value chain, various horizontal and vertical relationships exist so that the primary processing of raw materials may, for instance, be shared between two or more processing plants, while local suppliers and subcontractors are involved in activities such as raw material supply, packaging, business services or transportation. While this is essentially a structural point describing how the chain works and how actors are directly or indirectly connected, it also underlines the need to understand how intra-node relationships and processes can potentially reduce or increase entry barriers (e.g. [13]). Suppliers include farmers, fresh food traders and local processors that buyers choose to – or choose not to – buy from. While prior research has mainly identified barriers for fresh food suppliers entering into *global* value chains, which are commonly set by global buyers, this paper explores barriers to value-added processed products in the Kenyan domestic market, as outlined above. To this end, three overall categories of entry barriers based on Thomsen [40] may be distinguished:

- I. *Industry entry barriers* are barriers that businesses face in the process of establishment. They are highly interlinked with the business environment, which is regulated through property rights, administrative procedures and the legal environment. Industry entry barriers may include a variety of parameters – often in the form of ownership over, and access to, different types of resources – and differ between from place to place. These resources are commonly land, buildings, licenses and capital. Industry entry barriers are therefore inherently linked to the nature of the banking sector, financial markets, informal credit systems and micro finance, as well as, for example, to land ownership in the country in which the food processors (in our case) are based. The importance of this is highlighted in the present study by the fact that high cost of capital was identified as the main constraining factor by 27% of the Kenyan business owners in our survey (see the section on "Methodology"), making this the most commonly mentioned constraint on business establishment and growth.
- II. *Market entry barriers* relate to end-markets and can vary e.g. due to the degree of regulation. Such barriers include, for example, import-export regulations for finished goods and inputs, as well as customs services. Regulations on cross-border trade affect suppliers' sales to domestic markets through their impact on the importation of raw materials.

Table 1
Overview of interviewed firms in the food processing industry in Kenya.

Product group	Total valid population	Number of firms interviewed	Share of total population interviewed (%)
Snacks	47	13	28
Grain milling	44	13	30
Dairy	32	13	41
Sauces, jams	12	6	50
Edible oils	6	3	50
Total	141	48	34

Source: Field Survey 2014.

Infrastructure can also be a market entry barrier and is particularly important when proximity to markets and short lead times are essential (as is commonly the case for fresh and unpreserved food products), requiring the availability of appropriate storage and distribution channels [8,11,13,22]. Long transportation times and distances thus affect suppliers' competitiveness. The extent to which proximity to markets has a positive effect depends on the deficiencies in transport networks, the quality of transport and logistics services, the uncertainty created by transit through neighbouring countries or remote rural areas, and the costs of potential informal payments [4,44].

- III. *Chain entry barriers* are created by buyers (i.e., food retailers), either individually or in coalitions. These barriers relate to the specific qualifications and resources that individual suppliers need to enter a given chain. Financial requirements for suppliers created by global retailers have been identified as major entry barriers to entering global value chains [14,28,33,39]. Suppliers must finance a variety of tasks themselves to enter and remain in a particular chain. A range of international standards have also been singled out as further increasing the entry barriers for global value chains (e.g., [15,17,19,21,23,34]). In the food industry, such standards relate to food safety and, increasingly, to sustainability, especially in highly regulated western markets, and have expanded with the globalisation of retail [24,35,36,42]. While standards may imply the possibility for industrial upgrades by those suppliers that are able to comply, they are seen as potential entry barriers to global markets for those suppliers that are not able to comply [16,21].

Methodology

This paper is partly exploratory in nature due to limited knowledge in the field concerning the food processing sector in Kenya. Although the study on which the paper is based applied a mixed-method research design involving three different approaches, the paper has mainly used the literature review and in-depth interviews with food processing firms [20]. McCormick et al. [25] provide general information about the Successful African Firms and Institutional Change (SAFIC) project on which this paper draws.

The first phase of data collection for this paper, in line with the SAFIC project, involved assessing the available literature on businesses in Africa, and in particular the literature on successful African firms. In the case of this paper, the team paid attention to the literature on entry barriers. The second phases combined two methods of data collection, namely, a mapping exercise and a survey exercise, which were conducted between 2013 and 2014. Due to the lack of a usable sampling frame of firms in the food processing industry, the mapping phase aimed to identify the firms in this subsector of food-processing and to track their location, ownership and production. The project focused on successful African-owned firms operating in the grain milling, dairy processing, snacks, sauces and jams, and edible oils subsectors. The SAFIC project focused on food processing firms that (a) were under Kenyan ownership, (b) were at least five years old, (c) had a labour force of at least ten employees, and (d) were located within the Nairobi Metropolitan Area [25]. At the end of this mapping exercise, a total of 141 food processing firms that met the criteria were identified.

The third phase of data collection consisted of a census among the 141 identified firms using a survey questionnaire. This questionnaire had six main sections, including one on markets, key customers and entry barriers. The firms were first contacted by phone in order to book interview appointments. The interviews were conducted by the researchers and research assistants. Managers and owners were interviewed at their company premises, with the interviews lasting around one or two hours. In some cases, surveys were followed up with additional visits or phone calls in order to obtain missing information and/or to tour the factory. By the end of the process, the survey had gathered information from 48 firms (as shown in Table 1). These 48 firms were distributed among the grain milling, dairy processing, snacks, sauces and jams, and edible oils subsectors. Although the total sample is fairly small (34%), it represents between 28% and 50% of each of the product groups and is thus considered to be representative of the target population. The survey data was analysed using univariate and bivariate methods, including basic correlations. The data was critical to identifying firms with unique characteristics that would be followed up for the qualitative data. It is important to note that the analysis in the current paper was not based on the quantitative survey data but on the qualitative information collected through case studies as discussed below.

The fourth phase, which forms the basis for this paper, was the collection of qualitative data through case studies. In 2015, a first qualitative interview of eight firms in four product groups was conducted. This was followed by a second round

Table 2
Kenya's domestic retailers by type.

Retail name	Ownership type	2011 Food sales (US\$)	Outlets (N)	Locations
Large diversified supermarket chains				
Nakumatt Holdings Ltd	Local	270 million	37	Kenya (30); Uganda (4); Rwanda (2); Tanzania (1)
Tuskys Ltd	Local	169 million	36	Kenya (32); Uganda (4)
Uchumi, Ltd	Local	104 million	26	Kenya (20); Uganda (5); Tanzania (1)
Naivas Ltd	Local	106 million	21	Kenya (21)
Smaller retail chains				
Chandarana Supermarkets, Ltd	Local	22 million	8	Kenya
Wagon Shopping Ltd	Local	n.a.	Online	Kenya
Quickmart	Local	n.a.	7	Kenya
Eastmatt Supermarkets	Local	n.a.	6	Kenya
Society Stores	Local	n.a.	6	Kenya
Tumaini Supermarket	Local	n.a.	3	Kenya
Cleanshelf Supermarkets Ltd	Local	n.a.	3	Kenya
Individual small retailers				
No list available. Estimated above 300 units	n.a.	n.a.	1–2	Kenya

Sources: Business Daily [3]; EuroMonitor [10].

of interviews with six firms in four product groups. Firms in the edible oils subsector do not feature in the case studies due to the small number of firms in this population and their unwillingness to be interviewed. All interviews were carried out by the principal researchers, accompanied by a project assistant tasked with recording and/or note taking. Qualitative data analysis involved transcribing each interview, reviewing it for possible errors and subjecting it to thematic content analysis, with themes drawn from theory, survey responses, and issues raised by respondents during prior or current interviews. NVivo was used to track themes and generate thematic reports. For this paper, particular attention was paid to issues relating to entry barriers.

Results and discussion

The number of 'modern' retail outlets in Kenya has risen to over 300. These retailers are mainly located in the larger urban areas, such as Nairobi, Mombasa and Kisumu, although they are increasingly expanding to smaller cities (see Table 2) [3,10]. In 2015, formal retail penetration was estimated at 20–25%. With the average value of a shopper's basket increasing by 67% in five years, Kenya has become Africa's fastest-growing retail market. Some 30% of consumers in contemporary Kenya purchase groceries in formal retail outlets, implying that the vast majority of consumers still shop in traditional outlets. For comparison, the percentage of consumers purchasing groceries in formal retail outlets South Africa was double that of Kenya, while it was only 4% in Ghana in 2015 [3].

The contemporary Kenyan retail sector thus consists of a combination of 'traditional' outlets, such as wet-markets and street hawkers, and 'modern' forms of retail, including foreign and domestic supermarkets, hypermarkets and convenience stores (see Table 2) [36]. The latter began to emerge in the country in the late 1980s, when two families established stores that grew from small mini-markets into what are now three of the four largest Kenyan supermarket chains, namely, Nakumatt, Tuskys, Naivas and Uchumi. Uchumi is Kenya's only publicly traded retail chain, reflecting a clear continued trend for family-owned retail in Kenya [1,3]. Tuskys alone had 37 branches in 2012 [5], and by 2015 the four largest chains operated a total of 140 stores [2,3]. The immediate success of these supermarkets was largely due to the introduction of relatively affordable private labels, an expansion into residential areas and the offering of loyalty schemes and 'one-stop shop' concepts [9,10]. However, both Nakumatt and Uchumi have recently found themselves in a state of crisis that has led to the closure of certain branches [38].

The Kenyan retail scene also includes a number of smaller domestic retail chains, defined here as those with three or more outlets (see Table 2). This group consists partly of businesses that have come into existence more recently and partly of long-established stores such as Chandarana, which has been in existence for over 50 years and, after mainly targeting the Asian community, has expanded its customer base. In 2015, the chain had ten stores in Nairobi and Mombasa and was planning an expansion with a focus on food rather than non-food products [3]. In addition to 'modern' retailers, numerous other retailers exist.

Another characteristic of the Kenyan retail sector is a very high share of local ownership as opposed to foreign ownership, with local owners holding dominant shares in the large domestically owned supermarket chains. Resistance to foreign entrants is relatively high and complicates mergers and acquisitions [2]. Despite this resistance, however, several foreign retailers – including Carrefour (France), Metro Cash & Carry (Germany), Massmart (South Africa) and Choppies (Botswana) – have opened or are planning to open stores in the country, attracted by the growing number of domestic consumers as well as the possibility of expanding into the East African region [32,37].

During interviews with the case firms, all 'modern' retail formats were commonly referred to as 'supermarkets' regardless of size. This analysis therefore does not distinguish between different types of modern retail formats, such as hypermarkets, supermarkets and convenience stores, but shows trends in food processors' sales to the sector in general. During the interviews, those retailers identified as sales channels by food processors were notably all domestic; foreign-owned retailers in Kenya were not mentioned at all. This may be at least partly explained by the fact that foreign retailers are a relatively recent phenomenon in Kenya. Numerous entry barriers dictate which of the existing food producers are able to sell to large domestic retailers and which are not. These barriers are important because the high number of small and large Kenyan food producers has led to a high level of competition between these entities. An example from the dairy industry is provided below.

'All the big companies you know are big because they do fresh milk. This is because fresh milk processing requires a huge investment. Now, that is why there are four or five companies that do fresh milk. And then, the other people who do (...) yoghurt like us are in the thousands, the reason being that there are no difficulties in establishing a firm (for starting to produce yoghurt) compared to other milk processing firms. It is for this reason that you find many small scale yoghurt processing firms (...). All that an investor needs is to walk and buy packing materials, walk into a printer shop to print label, and in by evening, you have your yoghurt (...). But you see, as it is always said, easy come, easy go. A lot of people come into this industry because it is easy to start a business, but around 80% do not survive beyond 6 months. The main barriers in yoghurt process are in the marketing, where it is saturated' (Interview, 2015).

Access to finance and payment terms

One major negative factor that was repeatedly stressed by food processors that sell to domestic supermarkets, particularly by those supplying the largest supermarkets, was delayed payments. One food processor explained how supermarkets are a major target but also pose a challenge to his business:

'If God helps... we are thinking we will be in all the supermarkets, beginning with Nairobi first, and then venture into other towns (...). However, the challenge with the supermarkets is that they delay payments to suppliers' (Interview, 2015).

According to several respondents, the large Kenyan supermarkets sometimes pay 60–80 days after receiving products. It became clear during the fieldwork that long payment periods were not anticipated by the food processors and that they did not agree to them up front. They were regarded as disappointing and financially problematic for the food processors, as expressed by one snack processor:

'Supermarket [name withdrawn] has brought us down... we supply them, [but] they do not pay' (Interview, 2016).

Interruptions in payments evidently have negative effects and become entry barriers for food processors, which consequently lack the capital to produce more and to receive/fulfil new orders and contracts. One firm blamed the financial situations of the fast-growing retailers themselves for the constant delays in payment, underlining the above-mentioned difficulties of Nakumatt and perhaps other local retailers:

'... the supermarkets delay because of the expansion program. They are unable to get that from the local lenders, so what they are doing is they use our money to fund their projects. [One] opens about five new branches every year, and one [of these] costs about three hundred million [shillings]. So, they use our money' (Interview, 2015).

Despite an overall trend towards an overreliance on larger supermarkets, a few processors have shifted their target market in response to the problem of late or non-payment. Instead of selling to the largest supermarkets, these processors have begun targeting smaller ones. Respondents stressed that payments were received more promptly (within 30–45 days) from smaller retailers than larger ones:

'What has probably changed is the over-reliance on the main supermarket chains (...) The concentration now is on the second and third tier because... they are easy going, they are easy to deal with, [they have] less bureaucracy, and payments are prompt – at least 30 days and at worst 45 days, in contrast to the big ones, which pay as late as 60–80 days after your supply' (Interview, 2016).

While the payment terms and practices of smaller retailers were often considered relatively good by the food processors interviewed, the barriers relating to finance apply to both smaller and larger retailers (albeit not to the same degree). Perhaps most importantly, supermarket suppliers of all sizes must finance orders on their own. This is clearly a major barrier to entering and remaining in these sourcing relationships, and studies of payment and finance in *global* value chains have revealed similar findings. The shift towards smaller retailers also relates to the finding that respondents were aware of the potential downsides of an overreliance on large supermarkets. Respondents sometimes stressed that they felt that power was entirely in the hands of the retailers when working with large retailers, while relationships with smaller retailers were more equal. As one processor put it:

'If we can end the over-reliance on the top-tier supermarkets and build on these other ones, then any given day, you will be better off. The good thing with the smaller ones... is that when they refuse to pay or their cheque bounces,

then I can influence other companies not to supply by simply citing that their cheque bounced or they defaulted. ... However, you see for the big supermarkets ... no one will even notice that [my firm] has not supplied their yoghurt' (Interview, 2016).

During the interviews, one significant challenge identified by food processors was that the prices for food products delivered to domestic supermarkets are 'stable at a low level' because the supermarkets have numerous suppliers to choose from. In contrast, the prices paid for local supply were commonly described as fluctuating heavily, and the profits changed accordingly when competition is harsh. One peanut processor explained the situation as follows:

'(...) I cannot adjust my supermarket prices upwards even when costs of production go high. They (supermarkets) would not agree as they are rigid. Why? Because my competitors are still supplying at that low price (...). So, if I increase mine, they will say, "No. Don't sell. Wait until the prices have gone down, and you will bring [your products] then." What happens [if I don't]? My customers will forget me and get used to another brand, and I will be out of the market. Even by the time I come back, they will have forgotten about my products' (Interview, 2015).

This constitutes an entry barrier that African-owned processors face in their attempts to penetrate supermarkets.

Standards

It is interesting to note that adoption of standards by the Kenyan food processing companies interviewed largely concerns compliance with Kenyan national standards. All businesses included in this study had obtained the required KEBS mark from the Kenyan Bureau of Standards. During interviews, however, the respondents sometimes seemed to view the KEBS mark as simply a logo rather than as a standard and made few references to content or requirements for compliance. These businesses tended to view the mandatory certification as an expensive necessity that made no real difference. Among the larger group of surveyed firms, 28.3% also comply with the volunteer quality mark, the Diamond Mark, also operated by the Kenyan Bureau of Standards. The most commonly used international standard, ISO 9002, also focuses primarily on quality. Only six (13%) of the interviewed companies had obtained the Hazard Analysis Critical Control Point (HACCP) certification required for global exports. This certification is increasingly used for sales to domestic and foreign 'modern' retailers entering the Kenyan retail food scene. In some cases, the food processors find that standards are unreasonable. For example, one nut processor described a requirement from a large supermarket that he guarantee the number of pieces in each package of nuts, even though the product is sold by weight.

'He insisted that a packet of 100 grams of cashew nuts should have 40 pieces. ... That's hard because the scale determines the pieces [that] will fit into the bag...' (Interview, 2016).

The quality of supplies was often stressed as an issue with consequences in terms of compliance with quality standards for finished products, as highlighted in the following quote:

'(...) we have quality issues with the milk we get from farmers because you find that instead of farmers giving the right nutrients to the cow, they go for these pineapple or brewery by-products. And when the milk is delivered, you find it smells like pineapples. So we discourage that, but still, they do it. Thus, you find milk from some regions does not have the best cream. However, this problem is region based' (Interview, 2016).

Selling to supermarkets has also brought with it a strong focus on product standards relating to consistency of size and shape, which were not mentioned by other buyers. One example of this was a requirement for peanuts to be consistent in size so that packages will have more or less the same number, which made it difficult to obtain the right supplies:

'The farmers find it difficult to deal with us because we need specific sizes of peanuts, bananas, and arrow roots, which they are not able to supply consistently' (Interview, 2016).

The standards also appear to have a relatively strong focus on nutrition and are sometimes established with the support of international non-governmental organisations (NGOs) that focus on food security and health. One maize processor explained how he introduces food fortification to his flour products for the local market:

'(...) the government is now urging millers to fortify their products by adding iron and other things. So, we are moving in that direction so that our flour will be more to that standard' (Interview, 2015).

Indeed, nutrition seems to be a relatively important focus of standards and is often weighted more heavily in international food safety regulations. Overall, the food processors in our study appear to focus on Kenyan and, in some cases, regional markets over global exports. For some respondents, this tendency was part of a longer-term strategy of not only focusing on the middle class but also adopting so-called base-of-the-pyramid strategies [20]. Ideas for new products thus included cheap and supposedly healthy snacks in small packages that would appeal not only to the middle-class consumers that may shop in supermarkets but also to poorer segments of the population.

Supply and infrastructure constraints

Finally, access to various types of supplies, including raw materials, is of clear importance to food processors. The Kenyan food processors sometimes identified high input costs as problematic and as undermining their ability to compete. This was commonly linked to commodity prices, as indicated below by one respondent:

‘Our prices are also very erratic. For example, I buy a bag of peanuts at Kshs. 10,000 today. The next day, [the price is] Kshs. 20,000 because the supply in the market will determine the price. When it comes to the locally available [products], like peanuts and *sim*, those prices are not controlled. You can buy at three different prices in the span of one week, so for us, it is a big challenge. This year, in January, we were buying at Kshs. 12,000, and in May, we were buying at Kshs. 20,000’ (Interview, 2016).

This underlines the point that a lack of competent suppliers is a serious barrier affecting food processors in Kenya. This may affect the quality of the available supplies and thus also of the processed products, which the literature shows is an important consideration on the part of supermarkets when selecting their suppliers ([26]:1169). As shown in the following quote, this is linked to prices as well as to transportation issues:

‘(...) we have been sourcing from brokers in Nyamakima (...). I cannot go for two, three or five bags or ten, so we have to wait for them to bring [the bags], and the cost is very high and erratic. So, like, *sim* and peanuts, we all get them from there. Fur fur and popcorn, those are imported. We get them from the Asians who import, and they also have their own challenges. At times, they ask for goods, and these have been delayed. So, at times, we may not sell fur, because there is none in the market or that which is available is of bad quality. We look at our quality; we would rather not sell than sell anything that is not good quality’ (Interview, 2016).

A lack of appropriate technologies, and especially a lack of capital to invest in such technologies, was identified as another barrier for food processing firms attempting to access modern food retailers. Related to this is the inclusion of information such as the date of manufacture, physical address and contact details on the packaging. This requires the processors to have appropriate technologies.

‘We have not acquired a machine for that packing. We are doing it manually. We have not been able to purchase one... it is expensive. So we are doing manual packaging... Stainless steel is too expensive. It is at least ten times more expensive than normal steel. You can find a small pasteurizer doing 500 litres costing me about Kshs. 1 million, while an ordinary one would go for Kshs. 100,000’ (Interview, 2016).

It is important to keep in mind that there is a very clear link between limitations in access to both supply and infrastructure. But while infrastructure plays an important role in determining the competency of food processors and, by extension, their ability to compete in accessing modern retailers, the literature suggests that this issue has not been well researched [26,27]. Infrastructure is essential in the food industry, where freshness of the supply is often essential. Limitations may be related to a lack of cold chains and storage, as well as transport volumes and speed. Previous studies have shown that the reliability of suppliers to supermarkets is adversely affected by the state of infrastructure [26], and it is striking that only around 28% of the businesses in this study said that they were highly satisfied with the quality of the inputs received from their raw material suppliers.

Conclusions

This paper has explored the attempts by Kenyan food processors to supply domestic ‘modern’ retail sectors. We find that while these entities often prefer and aim to sell their products to supermarkets rather than traditional markets, a number of entry barriers exist in the country. These are all closely related to the resources and/or qualifications that food processors need to be able to perform the tasks expected by buyers and, hence, to become suppliers to the modern retail formats.

The barriers relate, to a large extent, to the requirements of supermarkets and primarily include pricing and payment terms, while the interconnected issues of standardisation, regulation and infrastructure also play a role. Overall, we find that Kenyan food processors generally want to sell their products to larger domestic supermarkets, which they view as new and promising outlets for their products, though only a few have succeeded in doing so. Second, these food processors feel that payment terms, especially with larger domestic supermarkets, are deteriorating, acting as a further barrier. Third, the requirements to be met by food processors in modern areas of the domestic retail sector show some similarities to those often highlighted in studies of suppliers attempting to sell to export markets. Fourth, ‘overreliance’ on the largest supermarket chains on the part of food processors has led to fierce competition among these processors. As a result, some are struggling for mere survival while others are refocusing on smaller supermarkets and convenience stores. Smaller stores were identified during interviews as being easier to interact with, especially in relation to bureaucracy and payment. Nonetheless, food suppliers selling products to supermarkets of all sizes commonly identified delayed payments and the need to finance orders themselves as major obstacles to supplying supermarkets and to the survival of their businesses.

While this paper makes several contributions, it also has one major limitation. Its analysis is limited to processors and does not include retailers such as supermarkets. This is an important area for future research to explore. It would then be possible to compare and contrast the findings for these two groups – processors and retailers. Another limitation is the

paper's dependence on cross-sectional analysis. Future research could focus on time series or panel data to allow rigorous econometric analysis that can demonstrate causation and correlation.

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References

- [1] Bloomberg (2016) <http://www.bloomberg.com/news/articles/2016-01-20/uchumi-of-kenya-mulls-starting-ops-in-drc-ethiopia-nigeria>.
- [2] Business Daily, Supermarkets Edge-out Kiosks in the Race for Kenyan Consumers, Business Daily Corporate News, 2016 March 21. Accessed from <https://www.businessdailyafrica.com/Coroparteneews> on 30 July 2018.
- [3] Business Daily, Kenya Ranked Africa's Second Biggest Market for Retail Investors, Business Daily Corporate News, 2015 March 3. Accessed from <https://www.businessdailyafrica.com/Coroparteneews> on 25 July 2018.
- [4] S. Coulibaly, L. Thomsen, Connecting to regional markets? Transport, logistics services and international transit challenges for Central Asian food-processing firms, *Centr. Asian Surv.* 35 (1) (2016) 16–25.
- [5] Daily Nation (2012). <http://www.nation.co.ke/business/The-tale-of-Kenyas-three-biggest-chain-of-supermarkets-/-/996/1404224/-/hw5grd/-/index.html>. May 11th 2012 Kenyan retailer Chandarana gearing up for faster growth [WWW Document], n.d. URL <https://www.howwemadeitinafrica.com/kenyan-retailer-chandarana-gearing-up-for-faster-growth/> (accessed 5.11.17).
- [6] D. Davis, R. Kaplinsky, M. Morris, Rents, power and governance in global value chains, *J. World Syst. Res.* 24 (1) (2018) 31–45.
- [7] C. Dolan, J. Humphrey, Changing governance patterns in the trade in fresh vegetables between Africa and the United Kingdom, *Environ. Plan. A* 36 (2004) 491–509, doi:10.1068/a35281.
- [8] C. Dolan, J. Humphrey, Governance and trade in fresh vegetables: the impact of UK supermarkets on the African horticulture industry, *J. Dev. Stud.* 37 (2000) 147–176.
- [9] EIU, Foreign Interest in the Fast-Growing Retail Sector is Rising (2013) December 2.
- [10] EuroMonitor, Retailing in Kenya (2016).
- [11] G. Gereffi, The organization of buyer-driven global commodity chains: how U.S. retailers shape overseas production networks, in: G. Gereffi, M. Korzeniewicz (Eds.), *Commodity Chains and Global Capitalism*, Greenwood Press, Westport, 1994, pp. 95–122.
- [12] G. Gereffi, M. Korzeniewicz (Eds.), *Commodity Chains and Global Capitalism*, Greenwood Press, Westport, 1994.
- [13] P. Gibbon, S. Ponte, Global value chains: from governance to governmentality, *Econ. Soc.* 37 (3) (2008) 365–392.
- [14] P. Gibbon, S. Ponte, *Trading Down: Africa, Value Chains, and the Global Economy*, Temple University Press, Philadelphia, 2005.
- [15] P. Gibbon, S. Ponte, E. Lazaro, Global Agro-food trade and standards: Challenges for Africa, Palgrave Macmillan, UK, 2010, doi:10.1057/9780230281356.
- [16] D. Giovannucci, S. Ponte, Standards as a new form of social contract? Sustainability initiatives in the coffee industry, *Food Policy* 30 (2005) 284–301, doi:10.1016/j.foodpol.2005.05.007.
- [17] S. Henson, J. Humphrey, Understanding the complexities of private standards in global agri-food chains as they impact developing countries, *J. Dev. Stud.* 46 (2010) 1628–1646, doi:10.1080/00220381003706494.
- [18] J. Humphrey, The supermarket revolution in developing countries: tidal wave or tough competitive struggle? *J. Econ. Geogr.* 7 (2007) 433–450, doi:10.1093/jeg/lbm008.
- [19] S. Jaffee, S. Henson, *Standards and Agro-Food Exports from Developing Countries: Rebalancing the Debate*, The World Bank, 2004.
- [20] P. Kamau, D. McCormick, Market Diversification Strategy and Success of Food Processing Firms in Kenya (2018) *IDS Working Paper No. 549*.
- [21] R. Kaplinsky, *The Role of Standards in Global Value Chains and their Impacts on Economic and Social Upgrading*, 2010.
- [22] J.B. Kussaga, L. Jacxsens, B.P. Tiisekwa, P.A. Luning, Food safety management systems performance in African food processing companies: a review of deficiencies and possible improvement strategies, *J. Sci. Food Agric.* (2014), doi:10.1002/jsfa.6575.
- [23] J. Lee, G. Gereffi, J. Beauvais, Global value chains and agrifood standards: challenges and possibilities for smallholders in developing countries, *Proc. Natl. Acad. Sci. USA* 109 (2012) 12326–12331, doi:10.1073/pnas.0913714108.
- [24] M. Lowe, N. Wrigley, The “Continuously morphing” retail tnc during market entry: interpreting tesco's expansion into the United States, *Econ. Geogr.* 86 (2010) 381–408, doi:10.1111/j.1944-8287.2010.01083.x.
- [25] D. McCormick, P. Kamau, R. Upadhyaya, L. Thomsen, J. Maalu, W.H. Nyukuri, *SAFIC Kenya Country Background Report*, Institute for Development Studies, University of Nairobi, 2013 (Unpublished).
- [26] F.A. Nandonde, J. Kuada, Modern food retailing buying behaviour in Africa: the case of Tanzania, *J. Buying Food Behav.* 118 (5) (2016) 1163–1178.
- [27] F.A. Nandonde, J. Kuada, Empirical studies of food retailing in developing countries, in: *Proceedings of the International Food Symposium Research (IFMRS) at Aarhus Business School, Denmark, 2014 19–20 June 2014*.
- [28] J. Neilson, B. Pritchard, *Value Chain Struggles: Institutions and Governance in the Plantation Districts of South India*, Wiley-Blackwell, Chichester, UK, 2009.
- [29] Neven, D. and Reardon, T. 2005. Supermarkets in Urban Kenya. Kenya Supermarket Research Project 1 Policy Brief General Research Approach.
- [30] J.J. Okello, C.-J. Lagerkvist, S. Hess, M. Ngigi, N. Karanja, Choice of fresh vegetable retail outlets by developing-country urban consumers: the case of kale consumers in Nairobi, Kenya, *Eur. J. Dev. Res.* 24 (2012) 434–449, doi:10.1057/ejdr.2011.58.
- [31] S. Ouma, Assembling export markets: the making and unmaking of global food connections in West Africa, *Assembling Export Markets: The Making and Unmaking of Global Food Connections in West Africa*, John Wiley & Sons, 2015, doi:10.1002/9781118632567.
- [32] S. Ouma, L. Whitfield, *The making and remaking of agro-industries in Africa*, *J. Dev. Stud.* 48 (2012) 301–307.
- [33] F. Palpacuer, P. Gibbon, L. Thomsen, New challenges for developing country suppliers in global clothing chains: a comparative European perspective, *World Dev.* 33 (2005) 409–430, doi:10.1016/j.worlddev.2004.09.007.
- [34] S. Ponte, P. Gibbon, J. Vestergaard, *Governing Through Standards: Origins, Drivers and Limitations*, Palgrave Macmillan, 2011.
- [35] T. Reardon, C.B. Barrett, J.A. Berdegue, J.F.M. Swinnen, Agrifood industry transformation and small farmers in developing countries, *World Dev.* 37 (2009) 1717–1727, doi:10.1016/j.worlddev.2008.08.023.
- [36] T. Reardon, R. Hopkins, The supermarket revolution in developing countries: policies to address emerging tensions among supermarkets, suppliers and traditional retailers, *Eur. J. Dev. Res.* 18 (2006) 522–545, doi:10.1080/09578810601070613.
- [37] Reuters. 2015. Africa Business – Supermarket Chains vie to unlock Kenya Retail Market. Reuters, 19 February, <https://af.reuters.com/article/rwandaNews/idAFL4NOVR3SH20150219>.
- [38] Reuters (2015) <http://www.reuters.com/article/kenya-retail-idUSL4NOVR3SH20150219> Turmoil engulfs Kenya's supermarket success Nakumatt, <http://www.enca.com/africa/turmoilengulfs-kenyas-supermarket-success-nakumatt>.
- [39] J.F.M. Swinnen, M. Maertens, Finance through food and commodity value chains in a globalized economy, *Finance for Food: Towards New Agricultural and Rural Finance*, Springer Open, 2014, pp. 45–65, doi:10.1007/978-3-642-54034-9_3.
- [40] L. Thomsen, Accessing global value chains? The role of business–state relations in the private clothing industry in Vietnam, *J. Econ. Geogr.* 7 (6) (2007) 753–776.

- [41] S. Wood, N.M. Coe, N. Wrigley, Multi-Scalar localization and capability transference: exploring embeddedness in the Asian retail expansion of Tesco, *Reg. Stud.* 50 (2016) 475–495, doi:[10.1080/00343404.2014.926317](https://doi.org/10.1080/00343404.2014.926317).
- [42] N. Wrigley, M. Lowe, Introduction: transactional retail and the global economy, *J. Econ. Geogr.* 7 (4) (2007) 337–340.
- [43] N. Wrigley, N.M. Coe, A. Currah, Globalizing retail: conceptualizing the distribution-based transnational corporation (TNC), *Prog. Hum. Geogr.* 29 (2005) 437–457, doi:[10.1191/0309132505ph559oa](https://doi.org/10.1191/0309132505ph559oa).
- [44] World Bank, *Transformation Through Infrastructure: Concept and Issues*, World Bank, Washington DC, 2011.