Losing out to Supermarkets

The Transformation of Fruit and Vegetable Supply Chains in Southern Africa

Abstract. Supermarket chains have spread throughout Southern Africa and thereby restructured agri-food markets. Fragmented public markets have increasingly been replaced by supermarket stores which can offer products of better quality at lower prices. Those farmers who previously supplied public markets are now superfluous and have difficulties in entering new supermarket channels due to high entry requirements, in particular private standards. Although the expansion of supermarkets provides new opportunities for smallholders to participate in new supply chains, their inclusion has failed as supermarkets have not been able or willing to support farmers sufficiently. Instead, they co-operate with bigger farms which are able to meet their standards, or import the desired produce. Several alternative strategies for smallholders have been suggested, however, it remains uncertain whether an inclusion of smallholders into supermarket channels is the best available approach at all.

Introduction

Supermarkets have long been associated with the just industrialised world. However, for about fifteen years now, supermarkets have spread throughout the world, including into developing and transition economies (Louw et al. 2009: 3), serving not only rich consumers who live in capital cities or wealthy neighbourhoods, but also mid-size and small rural towns (Weatherspoon & Reardon 2003: 335, Reardon et al. 2003: 1140; Bruce 2006: 163). This development has deep implications for local food markets.

When examining the recent changes of local food markets in Sub-Saharan Africa, development research has focused almost exclusively on UK importers and supermarkets procuring horticultural products from African, in particular Kenyan growers (see Dolan & Humphrey 2000; McCulloch & Ota 2002; Jaffee 2003; Jensen 2004; Henson et al. 2005; Okello 2005; Asfaw et al. 2010; Ouma 2010).[1] Also donor and government programs have focused on helping producers to gain access to such international markets. This focus has recently been criticised with

[1] This strain of research has primarily focused on the impact of ethical as well as supermarkets' private standards regarding food safety and Good Agricultural Practice (GAP) on the suppliers of horticultural products including flowers. For a critical analysis of the imposition of private standards on Zambian and Zimbabwean exporters by supermarkets in high-income countries, see Friedberg (2003).

the argument that export crops are 'mainly mere enclaves' (Weatherspoon & Reardon 2003: 344; cf. Reardon et al. 2003): Almost all of Sub-Saharan Africa's food output is consumed within the continent; with regard to fruit and vegetables, it is almost a closed economy with only a very small share based on international trade. This means that the domestic food retail sector has more impact on local food suppliers, depending on their scale, than production for export (Weatherspoon & Reardon 2003: 344). Thus, although the European-supermarket-led transformation of trade is indeed important, Weatherspoon & Reardon (2003: 334) argue that its impact on African producers is dwarfed by the mushrooming of supermarkets *within* Sub-Saharan Africa itself.[2]

However, as the rise of supermarkets within the continent has been quite recent and very rapid, it is rarely discussed in development literature; an omission which might also be due to the fact that African governments do not collect statistical information on this phenomenon yet (Weatherspoon & Reardon 2003: 334). Therefore, only a few empirical studies have gone beyond the initial work of Weatherspoon & Reardon (2003) analysing the impact of foreign supermarkets on host nations (Emongor & Kirsten 2009: 61). Only recently, studies about the restructuring of regional agri-food retail sectors and their impact on food suppliers in Eastern and Southern Africa have been increasing (see Hichaambwa et al. 2007; Louw et al. 2007, 2009; Proctor 2007; Miller 2008; Emongor & Kirsten 2009, Neven et al. 2009; Rao & Qaim 2011)[3]. The present paper will draw on this body of literature and concentrate on the transformation of domestic food markets with regard to fresh fruit and vegetables.

It will begin by describing the rise of supermarkets around the globe and in Southern Africa, with emphasis on the factors that led to the rise and spread of South African supermarket chains throughout the region. Drawing on recent studies, the second part explores the implications of this transformation, analysing the displacement of decentralised public markets by supermarkets and their centralised procurement systems and its effect on producers, particularly small farms. It will be argued that the presence of supermarkets and their demand for fresh fruit and vegetables crowds out opportunities for producers. However, the

[2] Reardon et al. (2003: 1142) note that the spread of supermarkets in developing countries has taken only one-fifth of the time it took in industrialised countries.

[3] The studies from 2007 have been completed in the context of the IIED's 2005-2007 research project 'Regoverning Markets', which investigated the inclusion of small-scale producers in supermarket channels. For detailed information, see the project's website: www.regoverningmarkets.org.

participation in this supply chain represents a huge challenge for smallholders[4] due to a lack of the financial, physical and human capital that is necessary in order to gain access to supermarket channels and to meet new standards with regard to food quality, safety, appearance and volume.

On this basis, a case study of a supermarket-led project in Zambia, which aimed to integrate smallholders into the new market structure, will be described. The following part will analyse the case study and argue that despite supermarkets' claims to enable farmers to comply with supply conditions and contribute to local development through this effort, retailers are not prepared to make the necessary investment. Thereafter, possible steps for an effective inclusion of smallholders and alternative strategies will be identified.

II. The Global Food Retail Revolution

One crucial factor for the take-off of supermarkets in developing countries was foreign direct investment (FDI): Saturation and intense competition in the home markets as well as promising margins and susceptible economic environments led to the 'first round of FDI' by European and U.S. supermarket chains in several developing countries (Reardon et al. 2003: 1141). The spread of supermarkets began in Latin American cities in the early 90s (see Reardon & Berdegué 2002), followed by South East and East Asian cites: Global multinationals such as *Ahold*, *Wal-mart* and *Carrefour* started in the richer countries and then extended to the smaller ones of each region (Weatherspoon & Reardon 2003: 335). The third wave in the mid 90s hit Central American cities, Southern and Eastern Africa and later, since 2003, South Asia and other parts of Sub-Saharan Africa (Reardon & Hopkins 2006: 525; Chen & Stamoulis 2008: 145). Since then, supermarkets have spread to smaller cities and rural areas of the original regions (Reardon et al. 2003: 1142).

In addition to many foreign-owned chains, domestic supermarkets have also spread very rapidly in South and East Africa since the mid and late 90s with decided acceleration since 2000, proliferating in not only big cities, but also in smaller towns and poorer areas (Weatherspoon & Reardon 2003: 333; Reardon & Hopkins 2006: 525; Louw et al. 2009: 21). This expansion is due to supply as well as demand-side factors: An important supply-side factor was the spread of the

[4] Smallholders are most often not defined; however, Neven et al. (2009: 1804) refer as small-scale farms to those with 1.8-2.4 ha of farmland. As this definition is based on the situation in Kenya, these numbers should be considered as a point of reference only.

internet, new retail procurement logistics technologies and inventory management systems which facilitated coordination between suppliers and retailers (Reardon et al. 2003: 1141). On the other side, the rapid expansion of supermarkets has been accelerated in particular by population growth, urbanisation, improvement of transport infrastructure and the rapid rise of the middle class (Weatherspoon & Reardon 2003: 333). The related rise in income led to a rapid growth in the ownership of cars and refrigerators, which resulted in the ability to replace daily with weekly or monthly shopping (Reardon et al. 2003: 1141).[5] Louw et al. (2009: 6) point to another crucial factor for the success of supermarkets locally as well as on a global scale: wider media penetration and the impact of advertising should not be underestimated as a driving force for the increased demand for high-value[6] goods and a healthy diet (cf. Dolan & Humphrey 2000: 156; Bruce 2006: 163). Recently, supermarkets have also started to spread well beyond the middle-class, penetrating deeply into the food markets of the poorer sections of society (Reardon et al. 2003: 1144).

The front runner in this development is the Republic of South Africa, with the supermarkets' share in the national food retail having tripled in less than two decades to about 60 per cent in 2003 (Weatherspoon & Reardon 2003: 337).[7] Supermarkets, which have started to spread since the end of *Apartheid* in 1994, totalled over 1700 stores in 2000 (Weatherspoon & Reardon 2003: 337) and doubled again to reach over 3500 in 2009 (USDA FAS 2010b). Furthermore, in the 'second round' of FDI South African supermarket chains started to invest in many other African countries as well as in India, Australia and the Philippines, resulting in an even higher concentration of supermarkets in these areas (Weatherspoon & Reardon 2003: 335). The runner-up is Kenya with about 100 supermarkets (USDA FAS 2010a),[8] followed by Zimbabwe, Zambia and Namibia (Reardon et al. 2003: 1142). However, in contrast to supermarkets in South Africa and Kenya,

[5] Furthermore, Studies have shown that with rising income, 'the proportion of disposable income spent on processed food increases away from staple foods to convenience and pre-prepared meals' (Louw et al. 2009: 8), thus demand for supermarkets' products increases.

[6] Interestingly, there is a strong discourse about 'value' and 'high-quality'. The assumption that supermarket necessarily equals quality can be questioned since advertisement and ideas about modernisation, where supermarkets are referred to as 'modern' while markets, often open-air, are termed 'traditional', might be more relevant than empirical characteristics in the forming of such opinions.

[7] For comparison, supermarkets' average share of national food retail volumes in the US as well as in France is 80 per cent (Weatherspoon & Reardon 2003: 337).

[8] Interestingly, the number of supermarkets was estimated at 300 in the year 2000 (Weatherspoon & Reardon 2003: 337). This diminishment of the number of supermarkets may be the result of amalgamation of several stores into a bigger hypermarket, rather than of a breakdown of stores.

supermarket chains in the latter three countries are predominantly owned by foreign investors.

South Africa's growing middle class as well as its good infrastructure account for the success of supermarket chains in urban centres, townships and rural areas. In 2009, the supermarket sector was made up of only four main corporations: *Shoprite* (42% of the market share), *Pick 'n Pay* (35%), *Spar* (20%) and *Woolworth* (less than 5%), all owned by large South African holding companies (USDA FAS 2010b). The latter two in particular target middle and high-income consumers, providing fresh and high-quality, including organic, gourmet and imported food (USDA FAS 2010b).[9]

Shoprite and Pick 'n Pay were founded over three and four decades ago respectively, but their meteoric rise did not start before the late 90s (Weatherspoon & Reardon 2003: 337). Saturated markets as well as competitive pressure at the top end of the market by Woolworth and Spar, which are both located in upmarket neighbourhoods, led to the expansion of both chains into the formerly under-stored rural towns, former homelands and townships, offering poorer-income goods (Weatherspoon & Reardon 2003: 338).

Besides this domestic spread, Shoprite, Africa's largest food retailer, is on a rapid expansion path: According to the latest numbers available (Shoprite 2010), the *Shoprite Group* has undertaken FDI in fifteen countries across Africa, including Madagascar and Mauritius. This is relevant insofar as FDI, in addition to increasing the total number of stores, may trigger domestic supermarket companies in the receiving country to expand: In Latin America as well as East and South East Asia, FDI initiated a spread of domestic chains which tried to establish strongholds in order to withstand foreign competition (Weatherspoon & Reardon 2003: 340).

III. Restructured agri-food market: Squeezing out smallholders?

The rise of supermarkets in Southern Africa led to enormous changes to agri-food markets in the whole region: Fragmented local public markets with retail and wholesale functions, as well as established smaller shops such as convenience or *mom and pop* stores which have traditionally sold fresh fruit and vegetables,

[9] In 2000, the market share of Shoprite and Pick 'n Pay was 40 per cent each, of Spar and Woolworth 5 per cent each (Weatherspoon & Reardon 2003: 337). With regard to the more recent data (USDA FAS 2010b), this clearly indicates the growth of Shoprite and the squeezing out of Woolworth by Spar. Woolworth is now predominantly present in the form of convenience stores (USDA FAS 2010b).

have been displaced by larger and centralised supermarkets which are able to open seven days a week and provide better quality at lower cost (Louw et al. 2009: 2; Weatherspoon & Reardon 2003: 335, 345).[10] In general, this de-fragmentation first occurs in grains, followed by fresh produce such as fruit and vegetables, but also meat, fish, eggs and milk (Reardon et al. 2003: 1140). Not only in work or city centres, but also in residential areas and poorer rural neighbourhoods, street vendors and informal *spaza* shops have been replaced by supermarkets (USDA FAS 2010a).

Until this development, farmers have always had access to several markets for their produce. They have sold produce to local consumers within the vicinity of the farm and sometimes through middlemen to wholesale markets. As a result of the closure of smaller retailers, the 'supermarket market' is increasingly important for consumers and also for producers, for whom it becomes the major source of demand (Weatherspoon & Reardon 2003: 344).[11]

The new supermarkets are much more demanding with regard to product quality and consistency, often requiring compliance with private standards with regard to production, food safety and presentation. Furthermore, they also require higher volumes of food, and delivery in time (Weatherspoon & Reardon 2003: 334). In general, supermarkets use two ways of procuring fresh fruit and vegetables (FFV): Through distribution centres (DC) or the wholesale market (Weatherspoon & Reardon 2003: 346). Shoprite for example receives about 90% through DCs which are run by its own subsidiary company *Freshmark*. This company is essentially a wholesaler which has a 'preferred list' of about 500 suppliers in the Southern African region (Shoprite 2008) and enforces private standards on behalf of Shoprite (Reardon et al. 2003: 1145): The DC informs its suppliers about the required volume and quality attributes such as size and colour, and also about standards regarding pesticides and microbial residues. In order to control the farms' compliance with respect to phytosanitary and hygiene standards, they also use third-party certifiers (Weatherspoon & Reardon 2003: 348).

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[10] However, displacement is not a homogeneous process, but depends upon the concentration and location of supermarket stores and their target group. Therefore, local markets, especially those with higher distance to the supermarket stores, are not yet completely displaced, but are still of relevance for both consumers and suppliers.
[11] However, this assumption has to be put into perspective: There is still a vibrant informal market in Southern Africa to which small farmers can supply their products at the moment, sometimes even with higher margins as they face less transaction costs and a lower reject rate due to less stringent standards (Emongor & Kirsten 2009: 66; Louw et al. 2009: 2, 11).

Post-harvest duties are turned over to the farmers: About 95% of produce is already washed, packed, labelled and bar-coded, prepared for direct delivery to supermarkets when it arrives in the DC. Despite this additional work and expense for farmers, they are not paid until 20 to 30 days after delivery; this is in sharp contrast to the practice of public markets where payments are due on the spot. Furthermore, all supplying farmers have to bring their produce to the DC in refrigerated vehicles, which are either owned or rented (Weatherspoon & Reardon 2003: 349).

If growers are not able to maintain quality standards within tolerance margins, they can be dropped off the list. In addition, Freshmark does not issue written contracts due to price variability (Weatherspoon & Reardon 2003: 349).[12] All these requirements lead to a situation where mainly large farms which are able to cope with the cash flow implications of investing the capital needed to deliver reliably, maintain volume and quality standards are able to participate in the supermarket supply chain (Weatherspoon & Reardon 2003: 349).

Freshmark has established long and good relationships, as in 2003, 80% of the suppliers had been with them for twelve years or more, while only a handful were de-listed every year. However, the majority of the delivering farms are mid-sized or large what points to the exclusion of smallholders (Weatherspoon & Reardon 2003: 349). Emongor and Kirsten (2009) point to an endogeneity problem, that is the analytical difficulty of determining the causes for this dominance of major farms: It is difficult to prove whether farmers have been relatively well capitalised *before* they supplied Shoprite, or whether their comparatively large size is a *product* of their participation in supermarket supply channels and the resulting economic gains (cf. Neven et al. 2009: 1806).[13] However, in the light of the large number of entry requirements and the organisation of the delivery process it s likely that small farmers are often excluded from the supply chain in the first place, even if there is no deliberate exclusion policy on the part of the buyer (Emongor & Kirsten 2009: 71). Although small farmers in particular need these new markets to escape from poverty, they often cannot cope with the standards and requirements which are much higher than it is common in public

[12] Though supermarkets have lists of farmers from whom they buy as well as written records of the transactions, there is usually no official contract (cf. Rao & Qaim 2010: 793, fn. 6). Official, that is with written and signed agreements, are relatively new in this sector, serving 'as incentives to suppliers to stay with the buyer', while the retailers are assured of on-time delivery of products with the desired quality (Reardon et al. 2003: 1145).

[13] This points to the necessity for precise research over a longer period of time, in order to avoid endogeneity problems.

markets (Weatherspoon & Reardon 2003: 351). Therefore, supermarkets draw primarily on well capitalised farmers who are most often already engaged in export activities and therefore comply with relatively high lobal private retail standards such as *GLOBALGAP*[14], which easily meet the supermarkets' requirements (Weatherspoon & Reardon 2003: 351) (Rao & Qaim 2011: 784).[15] On the other hand, large farmers themselves are rushing into supply relationships with supermarket chains in order to secure a stable market with good profits (Weatherspoon & Reardon 2003: 352). In cases where neither medium nor large growers are available, nor small farmers who can meet the standards, Freshmark imports produce from South Africa or neighbouring countries, in particular fruit and less perishable vegetables (Weatherspoon & Reardon 2003: 347). Such a procurement practice also endangers production in host countries as domestic produce has to compete with high quality imports (Emongor & Kirsten 2009: 76; cf. Brown & Sander 2007: 6).

This means that for medium-sized and large suppliers,[16] the presence of supermarkets and distribution centres can provide the opportunity to broaden their sales markets and thus raise their income: Participation in supermarket channels, both for export and regional supply, is associated with higher and more stable incomes (Rao & Qaim 2011: 782). However, less capitalised farmers are likely to be excluded from the supermarkets' procurement channels (Weatherspoon & Reardon 2003: 334).

This marginalisation of smaller farms is recognised in the literature, often linked to the recommendation to integrate and to upgrade them beforehand if necessary: Many scholars point to an urgent need for development programmes and policies to connect small farmers with the urban food markets and enable them to satisfy the supermarkets' demands with regard to standards for quality and safety and also the product requirements regarding volume, size and appearance (see for example Weatherspoon & Reardon 2003; Neven et al. 2006, 2009;

[14] EurepGAP, a common standard for Good Agricultural Practice (GAP), the implementation of which was obligatory in order to supply participating supermarkets, was launched by several European supermarket chains and their suppliers in the late 1990s. It was renamed GLOBALGAP in September 2007 and is since then applied globally.

[15] Neven et al. (2009: 1805) reject the assumption that supermarkets 'cherry pick' their suppliers from the export market. For horticultural produce in Kenya, they found rather the emergence of new farms which were set up by educated Kenyans with 'formal jobs' in the private or public sector who had started as hobby farmers and had converted bush, idle land or livestock into mid-size farms via clearing and irrigation. Thus, in this case as well, access was dependent on sufficient economic and human capital.

[16] Neven et al. (2009: 1804) found that farms having between 9 and 18 ha are most likely to supply supermarkets.

Hichaambwa et al. 2007; Louw et al. 2007, 2009; Emongor & Kirsten 2009; Rao & Qaim 2011). The improvement and expansion of linkages between smallholder farmers and supermarkets is seen as promoting local economic development. However, such co-operation is not easy to attain as the following part will demonstrate.

IV. Linking smallholders to supermarkets: The Luangeni project in East Zambia

As Shoprite dominates not only the supermarket scene in South Africa, but also in Namibia and Zambia (see Emongor & Kirsten 2009: 65), the next part will depict a case from East Zambia, where Shoprite tried to link with smallholder farmers.

As Zambia is signatory to trade organisations such as Comesa, SADS and the WTO, the country opens its borders to regional and international trade. In order to attract FDI, in the Zambian Development Act the government has arranged tax breaks for five years as well as other policies which benefit foreign investors**.** As a result, food retailers have entered the supply chain for most agricultural products. The South African supermarket chain Shoprite operates 18 stores with a floor space of over 2000m² each (Hichaambwa et al.2007: 1). The demand for horticultural products has also grown rapidly in Zambia due to urbanisation and increased income (Hichaambwa et al.2007: 1).

Shoprite has committed to a special focus on local smallholders in its corporate policy: The corporation promises to offer technical assistance to small farmers in order to enable them to supply supermarkets (Weatherspoon & Reardon 2003: 349). In addition, Shoprite's DCs claim to play 'a key role in equipping emerging farmers with the knowledge and skills to produce and meet international GLOBALG.A.P. standards' (Shoprite 2008). Since Freshmark not only supplies Shoprite stores country-wide, but also other supermarkets (Hichaambwa et al.2007: 2), they have a genuine interest in educating and to co-operating with farmers who can deliver high quality produce on time.

An example of the efforts to include small-holders is the *Luangeni Project,* a so called *Partnership Forum* which was formally launched in 2003.[17] The project was aimed at finding possibilities to create a partnership between Shoprite and

[17] Following a participatory observation study by two students of the University of Zambia in 1999, this project was initiated by the International Business Leaders Forum in the UK and the British Council, as well as the Danish Embassy in Lusaka (Weatherspoon & Reardon 2003: 349).

rural farmers of the Luangeni community in East Zambia. This project has indeed led to an agreement and resulted in the delivery of tomatoes, cabbages, lettuce, green beans and onions of high quality. However, in contrast to the positive depiction of the project by Weatherspoon & Reardon (2003: 349) as being 'innovative', Miller (2008) argues that it is not an example of good practice, but of company rhetoric, a rescue effort by Shoprite to appease local farmers who were furious that they were marginalised in the supply process and deprived of income due to a new supermarket which sold vegetables at unbeatably low prices in their trading area. As horticultural farmers were not able to compete with the new supermarket, they resisted its presence (Weatherspoon and Reardon 2003: 346): They protested and finally forced a procurement agreement on the company (Miller 2008: 45). Local farmers of the Luangeni village could finally expand their market by linking up with Shoprite: The regional distribution centre (DC) even sent its own trucks to small-scale growers in order to collect their vegetables, although this collection of small amounts of fresh fruit and vegetables from several different sites comes along with higher transaction costs for transport and the control of standards (Weatherspoon & Reardon 2003: 348).

Despite all this, the project faced several challenges: The local farmers did not always deliver the required quality or at the agreed time but complained that neither assistance nor training was provided (BMF 2009: 16). However, while the supermarket's management constantly emphasised the farmer's unreliability, some farmers were enthusiastic about the partnership as they had seen benefits which no other NGO had given them before: They were provided with seeds and fertilizers and received support payments in order to dig a well for an enhanced irrigation system (Miller 2008: 50).

By 2004, the high share of fruit and vegetable imports from South Africa had declined, with 85 per cent being supplied locally (Miller 2008: 42). However, the multinational's rhetoric of local empowerment became thin as soon as the partnership faced challenges. After a few years, the cooperation finally broke, local procurement stopped and Shoprite built up a *green market* next to its supermarket where local farmers could try to sell their produce. Since Shoprite sold the same produce at lower prices next door, the farmers faced competition similar to the period before the project (Miller 2005: 52).

Strikingly, Shoprite has been severely criticised by the South African *Bench Marks Foundation* (BMF), an NGO that advocates and monitors multinational corporations' performance in the field of social responsibility. Their study of

Shoprite in Zambia, Malawi and Swaziland (BMF 2009)[18] found that Shoprite does not entirely, in contrast to their publicity material, 'empower local suppliers in the countries they operate in by procuring fresh produce and perishable products locally' (2009: 15). Despite Shoprite's (2008; 2010) claim to assist local farmers in meeting private standards and quality requirements with extensive support and development programmes, and despite their stated and repeated policy of relying on local supply by small farmers in order to foster job creation and local development, the majority of produce available in Shoprite supermarkets in Zambia, Malawi and Swaziland (BMF 2009: 16) as well as in Botswana and Namibia (Emongor & Kirsten 2009: 69-70) was still supplied by South Africa, and commercial farms in Zimbabwe, Malawi and Tanzania (Hichaambwa et al.2007: 5). In the case of the Luangeni project, Miller (2008: 49) argues that Freshmark immediately replaced missing produce with imports, without giving the partnership forum much time for subsequent supply or to improve their performance. As a result of this import-favouring practice, Freshmark in Zambia sourced only about ten per cent of its vegetables from 22 small-scale farmers (Emongor & Kirsten 2009: 82) and had created 150 part-time jobs in the whole of Zambia in 2005 (BMF 2009: 16).

V. Future perspectives: Building capacities for compliance?

The Luangeni Project has shown how partnerships between foreign investors and local communities in host countries could be established. Research on Zambia, Botswana and Namibia has shown that the cash income of farmers has increased since they began supplying Shoprite and consequently their access to local health and educational services (Emongor & Kirsten 2009: 61). Even those farmers of the Luangeni community who do not supply Shoprite anymore had still improved their conditions: Due to the training provided through project partners, they produce better quality in higher quantity and thus attain higher incomes (Emongor & Kirsten 2009: 81). On the other hand some farmers complained that there was no training available (BMF 2009: 16).

[18] Though the BMF did not have easy access to staff which limited the study, collaboration in Zambia was best. The study does not only depict Shoprite's procurement practices, but also addresses questions of corporate social responsibility with regard to workers' rights and recruitment practices. Shoprite was particularly criticised for paying wages far below what was required for staff to survive and thus contributing to the casualisation of labour.

Participation in supermarket and export channels is seen as a key through which smallholder farmers in the Southern African region can escape poverty (Louw et al. 2007; Proctor 2007; cf. Asfaw et al. 2010). Certainly, Shoprite has the capacity to include small farmers in their supply chain, to create new jobs and to contribute to sustainable development and poverty reduction. However, potential co-operation between farmers and supermarkets is subject to substantial capital investment. When an 'upgrade' of smaller farms is possible, supermarket chains seem to be truly eager to participate in such projects (Weatherspoon & Reardon 2003: 352). However, the failure of the Luangeni partnership underlines the challenges for integrating less capitalised farms and less organised communities into the supply chain of supermarkets on a sustainable basis (Miller 2008: 52). The case has also shown that Shoprite does not seem to be willing to invest adequate means over a long period of time if the desired improvements do not swiftly materialise. The company's commitment to a partnership with local farmers can therefore be called into question.

Weatherspoon and Reardon (2003: 353) have argued that a 'socially responsible business' label similar to fair-trade certification could be used to increase the commitment of supermarkets to supporting and sourcing from smallholders, particularly as it could generate commercial benefits. However the value of such CSR related policies in terms of the actual influence on consumers or justification of premium prices for certified products is questionable, particularly as such schemes are sometimes mere 'public relations exercises' (BMF 2009: 20).

In light of the described limitations of supermarkets' own efforts to include smallholder farmers, other approaches to support their inclusion into the new food markets have been suggested. A promising way to improve their position seems to be the realisation of a collective strategy in the form of a co-operative or farmers' association. This would enable small farmers to collectively meet high volume demands (Weatherspoon & Reardon 2003: 351) and would reduce production and transportation costs through economies of scale (Neven et al. 2009: 1808). A collective unit also reduces power asymmetries between buyer and supplier (cf. Dolan & Humphrey 2000: 157), provides farmers with more bargaining power in price negotiations (Louw et at. 2009: 23; Emongor & Kirsten 2009: 72) and facilitates access to financial capital, that is credit at affordable interest rates (cf. Dolan & Humphrey 2000: 166). This credit in turn is necessary in order to undertake investments in physical capital[19] which would improve production (Neven & Reardon 2004: 695; Neven et al. 2009: 1804, 1810). In addition, Emongor & Kirsten (2009: 68) suggest concentration on the production of vegetables which are bulky and expensive to transport such as cabbage, which would provide local producers with a competitive advantage compared to imports. Collective units would also suit supermarkets' preference for working with a small number of partners in order to reduce transaction and communication costs (cf. Rao & Qaim 2011: 787).

However, cases from Latin America have shown that cooperatives have easily been formed and indeed facilitated initial access to supermarkets, yet they have not stayed in the market for long due to a lack of managerial skills and organisational issues (see Bergedgué et al. 2005; cf. Neven et al. 2009: 1810), suggesting that the formation of co-operatives should be supplemented by supporting programmes.

Thus, a complementary approach calls for concerted efforts from public as well as private partners to provide assistance beyond the direct financial scope, particularly in the form of sustained capacity building: Governments, NGOs and donors should not only invest in transport infrastructure and enhanced irrigation systems or fertilizers, but also improve education and extend financial services into rural areas (Neven et al. 2009: 1810; cf. Asfaw et al 2010: 272). This may involve both new incentives for private activities and also public interventions or *Public Private Partnerships* (Rao & Qaim 2011: 793; see Narrod et al. 2009). Farmers' ability to meet stringent quality standards, demonstrate due diligence in storage and transport, and market their produce could be improved through education and training (Hichaambwa et al.2007: 1). In addition, they could provide better access to market information, for example about national specifications with regard to food safety, particularly phytosanitary guidelines (Neven & Reardon 2004: 695, cf. Rao & Qaim 2011: 790; Brown & Sander 2007: 6).[20] After the improvement of agricultural production practices, as well as organisational development, small farms should be supported in establishing relationships with supermarkets, which they can maintain themselves after an initial phase of donor funding and

[19] For example cell phones, motorised vehicles and tractors, packing sheds, enhanced irrigation systems such as sprinklers or drip irrigation, greenhouses, shadow netting, post-harvest and cooling facilities, and so forth (Neven & Reardon 2004: 695; Neven et al. 2009: 1804, 1810).

[20] Rao and Qaim (2010: 793) have shown for Kenya that those farmers who received NGO support were indeed much more likely to participate in supermarket channels.

managerial support (Neven & Reardon 2004: 695; cf. Dolan & Humphrey 2000 161).

In addition to these strategies directed at the farmers themselves, scholars have called for efforts on an institutional level. For example, governments could regulate the external supply or adjust liberalised trade policies that allow FDI without any regulations regarding the integration of local farmers (Weatherspoon & Reardon 2003: 353; Neven & Reardon 2004: 693).[21]

There are also scholars who relativise the urgent need to integrate smallholders into supermarket procurement channels: Neven & Reardon (2004: 694) argue that the spread of supermarkets draws off medium-sized and large farmers from the public markets and thus opens opportunities for small-scale farmers to expand in this market. Furthermore, farmers in traditional channels could also benefit even when they do not supply supermarkets themselves, since supermarket developments 'may entail broader technological and institutional innovation' (Rao & Qaim 2011: 792; see Schipmann & Qaim 2010). Neven et al. (2009: 1803, 1810) go one step further and argue that, when capitalised farmers buy up the land of small farmers with fragmented plots, small farmers may benefit as labourers on these farms. In the case of horticultural exports from Kenya to the EU Humphrey et al. (2004: 79; cf. McCulloch & Ota 2002) argue that the shift away from smallholder production leads to increased employment, as growing demand leads to an expansion of paid work on commercial farms (Barrientos et al. 2005).

However, such employment opportunities on large farms are not unproblematic: Barrientos et al. (2005) and Smith & Dolan (2006) have shown for Kenya, South Africa and Zambia that most of the horticultural jobs were low-paid, insecure and predominantly done by women. Furthermore, temporary contracts prevailed, which excluded workers from labour rights and work-related benefits, made them vulnerable to economic shocks or seasonality, and forced migration, thus destabilising social relationships (cf. Kritzinger et al. 2004: 18). Although their research has focused on production for export, their findings can be generalised as many of the mid-size and large farms involved are also supplying domestic or regional DCs.

[21] In Tanzania, for example, concerns about high import-rates by Shoprite and capital repatriation to South Africa led to the national regulation that supermarkets source at least 40 per cent from Tanzanian producers, including fresh produce (Winter-Nelson 2002, cit. in Weatherspoon & Reardon 2003: 347).

VI. Conclusion

The paper has shown how the spread of supermarkets throughout Southern Africa has led to a restructuring of agri-food systems: Fragmented public markets have increasingly been replaced by supermarket stores which can offer products of better quality at lower prices. Those farmers who previously supplied public markets are now superfluous and have difficulties in entering supermarket channels due to high entry requirements, in particular private standards.

Certainly, the expansion of supermarkets provides new opportunities for farmers to participate in the supermarket channel and thus to gain higher and more reliable incomes. However, as this paper has shown, particularly the inclusion of small-scale farmers into this supply chain has failed, as supermarkets have not been able or willing to support them sufficiently so that they can meet the high private standards. Instead of upgrading smallholders, supermarkets co-operate with large farms which are able to meet their standards, or, if those farms are not present, import the desired produce.

In light of the failure of supermarket-led inclusion programmes, several alternative strategies to facilitate smallholders' integration into supermarket supply chains have been suggested, such as the expansion of farmers' collective action and supplementary concerted financial and educational support through donors, governments and NGOs. In some contexts, however, small farms' incorporation into already existing larger commercial farms might be more promising.

As the spread of supermarket takes place on a rapid rate, it remains crucial to invest in further research which updates previous findings and investigates recent developments. Particularly the role of informal markets, which can remain or even grow as vital alternatives of demand (cf. Emongor & Kirsten 2009), needs further attention. Another important topic for research, which has not been covered in this paper, is the impact of the restructuring process on processing firms: In Zambia, Namibia and Botswana, local fruit processors which produce canned fruit and vegetables, juice and jam were almost completely excluded from the supply chain (Emongor & Kirsten 2009: 71).

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