

Kiel Working Papers

Kiel Institute for the World Economy

The Relevance of Certifications and Business Practices in Linking Smallholders and Large Agrobusinesses in Sub-Sahara Africa

by

Linda Kleemann

No. 1997 | April 2015

Web: www.ifw-kiel.de

Kiel Working Paper No. 1997 | April 2015

The Relevance of Certifications and Business Practices in Linking Smallholders and Large Agro-businesses in Sub-Sahara Africa

Linda Kleemann

Abstract

Smallholders often have to certify according to international standards and produce under contract for large agro-businesses to access the export market. While mostly positive effects for the farmers have been found for contracts and certifications, little is known about the role of individual firm behavior and certifications in shaping farmer-agro-business relationships and contract success. This is what this article does. Data of 386 smallholders in the pineapple export sector in Ghana is analyzed quantitatively and enriched by a detailed case study of a large-scale agro-business in Ghana called Blues Skies. The results show that certification is an agent of change in farmer-agro-business relations. Building trust and aligning expectations of farmers and firms is important for success. Additionally, individual firm behavior matters more than taken into account in previous research. Our case study shows that three "R", reliability, reputation and respect, constitute the basis for contract relationships that benefit all.

Keywords: contract farming, certification, smallholders, Ghana, firm behavior

Linda Kleemann Kiel Institute for the World Economy 24100 Kiel, Germany E-mail: linda.kleemann@ifw-kiel.de

The responsibility for the contents of the working papers rests with the author, not the Institute. Since working papers are of a preliminary nature, it may be useful to contact the author of a particular working paper about results or caveats before referring to, or quoting, a paper. Any comments on working papers should be sent directly to the author.

Coverphoto: uni_com on photocase.com

1. Introduction

Sub-Saharan African smallholders that target global food markets usually produce under contract for medium or large agro-businesses and certify according to international food standards. While certification with GlobalGAP is a market entry condition for conventional food, especially for horticultural products, organic certification is required for the high-value organic food market. Retailers normally require that their suppliers adhere to one or more such standards (Henson et al 2011). This creates an entry barrier for suppliers and in particular for smallholders (Schuster & Maertens 2013). However, those that master the barrier may gain financially (Bellmare 2012, ITC 2011, Maertens & Swinnen 2009, Miyata et al. 2009, Subervie & Vagneron 2013, Warning and Key 2002), albeit this may not necessarily be enough to lift poor farmers out of poverty (Beuchelt & Zeller 2011). In addition, failure rates are relatively high (Bellemare 2012).

Often, the certification according to those food standards is organized via the exporter to which the smallholder is contracted. Generally, the literature finds positive short-run income effects for this kind of contract farming (Barrett et al. 2012, Bellemare 2012, Bolwig et al. 2009). These papers study either specific contract schemes (i.e. single agrobusinesses) or several contract firms, but without taking into account neither management practices by the firm nor the persistence of effects over more than one year, i.e. not taking into account contract failure. There are hence two major gaps in the literature: long-term effects and firm specific effects. Considering the large initial investment required, the existence of long-term net positive effects crucially depend on survival rates, i.e. the length of a specific contract farming relationship or certification period. In particular in Africa, failures of smallholder - agro-business contracts are common. In this article we show that firm management practices matter more for success than previously taken into account. Data of 386 either GlobalGAP or organic certified smallholders in the pineapple export sector in Ghana is analyzed quantitatively and enriched by a qualitative analysis of a case study of a large-scale agro-business called Blue Skies. We first show that certification does not only alter prices and costs; it is also a driver of change in farmer-agro-business relationships, because it requires upfront commitment and investment from both sides. Selfreported changes include a more intense relation and an improved overall relationship following certification, an important basis for long-term relationships. Long-term relationships allow for renewal of the certification. This is in the interest of both sides, due to the high initial certification cost. We use subjective self-statements to gain deeper information about the farmers' perceptions and motivations as these shape expectations. The match or mismatch between farmer motivation to join a certification or contract arrangement and the perception of the outcome of this process defines whether the farmer will be satisfied or disappointed with the outcome. Non-alignment may explain many failures of contract schemes. Second, firm management practices shape satisfaction and long-run success. Contracts last when both sides stick to each other. Some agro-businesses manage farmer relations much better than others. Our case study shows that three "R" reliability, reputation and respect - constitute the basis for contract relationships that benefit all. These successful firms accomplish to establish their corporate culture among their contract farmers and buffer them against international market volatility. Standards linked with contracts are short-run agents of change; individual firms determine whether they translate into long-run benefits.

The rest of the article is organized as follows. Section two describes the data that is used in this paper. Section three presents the analysis, section four concludes.

2. Data

The data used in this paper are a farmer survey in Ghana and a detailed case study of Blue Skies, a large-scale agro-business in Ghana. The data sources are linked through farmers identified in the survey and in the case study. We are hence able to compare farmers producing for Blue Skies with farmers in the same sector but producing for another firm.

The farmer survey was conducted from January to March 2010 in six different districts (Ajumako Enyan Esiam, Akuapem South, Ewutu-Efutu-Senya, Ga, Kwahu South and Mfantseman) of the Central, Eastern and Greater Accra regions in a radius of about 100 km north and west of Accra. Stratified random sampling in three stages was used. First, districts with significant amounts of commercial smallholder pineapple production were

selected, using information from SPEG (Sea Freight Pineapple Exporters of Ghana). Next, lists of all pineapple farmer groups in the selected districts that were GlobalGAP or organic certified were obtained¹. Finally, a percentage of farmers in each group were selected randomly from the lists². The sample is representative of the selected districts. Identified farmers answered a detailed questionnaire that bordered on the management of the pineapple farm, inputs for the production, harvesting and marketing of the pineapples, the certification process, and relations with exporters and processors that were exclusively medium- and large-scale agro-businesses. Respondents were also made to provide information on household characteristics, social capital and land disposition, as well as non-income wealth indicators and perceptions of different statements about environmental values, organic farming techniques and the use of fertilizers and pesticides.

The dataset includes 386 farmers from 75 villages with either GlobalGAP or organic certification for their pineapple farms. In total, 185 organic farmers and 201 conventional (GlobalGAP) certified farmers were interviewed. Organic farmers sold part of their produce as organic certified to exporters or processors and part of it on the local market, without any reference to the certification. Conventional farmers sold their produce as GlobalGAP certified to exporters or processors and on the local market, without reference to GlobalGAP certification. In principle, organic certified farmers could sell their produce as organic certified (which has the highest price) as first preference, as conventional export produce as second preference, or on the local market. It is not possible for conventional farmers to sell on the export organic market. Organic certification refers to the European standards according to EU regulation (EC) 834/2007 and (EC) 889/2008. All conventional farmers are GlobalGAP certified in our sample. Table 1 presents an overview of the data.

¹ Smallholders are certified in groups under the so-called option 2 certification.

² There are a lot more GlobalGAP certified farmers than organic certified farmers. For organic farmers we took 60-70% of each group, for conventional farmers 30-40%.

| Variable | Definition | Mean |
|----------|---|---------|
| | | (N=386) |
| GENDER | Gender of farmer | 0.935 |
| | 1 if male, 0 otherwise | |
| AGE | Age of farmer | 44.71 |
| HHSIZE | Household size (persons living in household) | 5.713 |
| ADULT | Fraction of adults (older than 15) in household | 0.651 |
| EDUC | Maximal educational level in household (years) | 9.879 |
| FSIZE | Farm size (acre) | 14.53 |
| OWNLAND | Share of land owned | 0.288 |
| PINLAND | Pineapple land (acre) | 3.565 |
| CREDIT | Access to credit during the last five years | 0.278 |
| | 1 if yes, 0 otherwise | |
| BANK | Bank account with more than 200 GHS | 0.422 |
| | 1 if yes, 0 otherwise | |
| WEALTH | Number of durable goods owned | 6.756 |
| EXPER | Years of experience in pineapple farming | 11.49 |
| | How pineapple farming was learned | |
| ENV | Importance of preserving the environment | 1.524 |
| | 1= very important,, 4= not important | |
| DIST | Distance to the closest local market (hours) | 0.746 |
| MD2 | Variety MD2 (1 if yes, 0 otherwise) | 0.320 |
| SC | Variety Smooth Cayenne (1 if yes, 0 otherwise) | 0.416 |
| ASSIST | Assistance or training for farming received during last | 0.717 |
| | 5 years (1 if yes, 0 otherwise) | |
| CERTYEAR | Number of certified years | 3.456 |
| BS | 1 if buyer is Blue Skies, 0 otherwise | 0.201 |

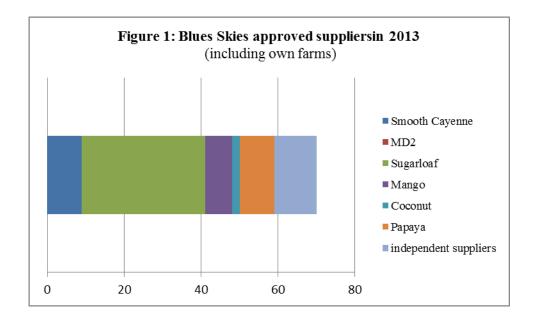
Table 1: Descriptive statistics of selected variables

We use a conversion factor of 1 Ghana Cedi (GHS) = 0.46 Euros (calculated on the basis of the exchange rate on January 12, 2010).

Almost all farmers are male, on average 45 years old, have 11 years of pineapple farming experience and live in a six person household. The average farm size is relatively large. However the majority of this is often fallow land of very low fertility used in a rotation system. In addition, given that many agro-businesses require minimum farm sizes, this is not unusual. Three pineapple varieties are planted, MD2, Smooth Cayenne and Sugarloaf, with some farmers planting two varieties. Economic and agro-business specific variables will be presented in Table 4.

The case study of Blue Skies, a large-scale agro-business in Ghana, was based on interviews with its suppliers, i.e. farmers, employees, management and communities in

which Blue Skies was active in 2013^3 . For the purpose of this paper, only the farmer and management interviews will be used. Blue Skies produces fresh cut fruit and fruit salads for export mainly to Europe and freshly squeezed juice for the local market. It buys both organic and GlobalGAP certified fruit from local farmers, mostly in a contract farming arrangement, but occasionally also on the spot market. Set up in Ghana in 1998, it is the second biggest private sector employer in Ghana with around 2000 employees, depending on the season. It has grown into a group of factories processing fresh fruit locally with additional smaller sites in Egypt, South Africa, Senegal, Brazil and UK. 55% of the total production value is created in Ghana, followed by UK with 16% and Egypt with 15%. Blue Skies currently employs over 2,500 people at all sites together and had a turnover of £43m and profit of £1.2m in 2012. Blue Skies has 70 supplying farmers, of which 59 are contracted suppliers. The rest are larger independent farms, including outside Ghana (Figure 1). Contracts with farmers are renewable yearly. They specify the certifications, crop variety, quality, brix levels and terms of payment. Prices are fixed in £GBP and renegotiated yearly. The overall acreage grown for Blue Skies is 1928 (including own farms).



Source: Blue Skies' statistics

³ The data gathered for the case study was collected by the author for a report commissioned by Waitrose, one of the buyers of Blue Skies' products. The information is used with permission from Blue Skies and Waitrose.

A combination of a standardized questionnaire and open qualitative interviews using the most significant change technique were used. Ten farmers were interviewed, representing the major crops grown for Blue Skies by smallholders: pineapple, mango, papaya and coconut. They were randomly drawn from the contracted supplier list, after two selection criteria were fulfilled: to cover all main crops grown for Blue Skies and to include both farmers that have been supplying to Blue Skies for a long time, and farmers that started recently. 4 pineapple farmers, 3 papaya farmers, 3 mango farmers and 1 coconut farmer were interviewed at their farms, where one grows both mango and papaya and the coconut farm is a sharecropping system with many families working and living on the farm. One person from the Blue Skies agronomy team always introduced us. Hence farmer interviews were not entirely conducted confidentially. This was the only possible way to be well received. Farmers were nevertheless very opinionated and sometimes even asked the agronomy team to listen and witness their complaints or requests. All interviews were made on the farms and with the farmer himself, all of whom were male. Each interview took between 30 minutes to one hour. In addition, interviews and informal discussions were led with the management of Blue Skies throughout the study period. The management of Blue Skies provided us with all the information requested on management practices, farmer statistics and policies, extension, certification, etc. and was always available for clarifications and feedback.

The two samples are linked in the following way: Famers who produce for Blue Skies were identified in the farmer survey.

3. Analysis

3.1. Certification as an agent of change in farmer - agro-business relations

The farmer survey has been quantitatively analyzed in particular with respect to return of investment in certification and agricultural practices in Kleemann et al. (2014) and Kleemann and Abdulai (2013). Here, we focus on the subjective statements that farmers were asked to give during the survey.

In our sample of farmers, self-reported changes of the certification process in general include a more intense relationship (farmer and agro-business talk more often to each other), an improved overall relationship following certification and longer contract durations with pre-specified volumes. Specifically, 63% of farmers report an improved overall relationship, against 36% reporting no change and 2% a worse relationship and the results for the intensity of the relationship are 76%, 24% and 1% respectively. Hence, certification alters not only prices and costs; it is also a driver of change in farmer-agrobusiness relationships and contract specification. One likely reason is the upfront commitment and investment from both sides that is required. The certification process can take several years (e.g. three years for organic) and hence there is a considerable time lag between the decision and the first market transaction as certified product. Longer-term contracts with pre-specified volumes are more frequent among certified farmers. Longer relationships (a larger number of years selling to the same buyer) allow for renewal of the certification. This is in the interest of both sides, due to the high initial certification cost. Certification, if managed as part of a contract relationship, could hence be an element of structure that shapes strategy.

Going more into detail, in this section we show how the players involved at different stages of the certification process, namely who gives information to whom and when and who initiates and organizes the whole process is strongly correlated with farmer satisfaction after the process is completed, which in turn is likely to be correlated with contract survival. First, we asked all farmers directly what their motivations for one or the other certification where⁴ and how they first got to know about the possibility of organic and GlobalGAP certification respectively. Organic farmers got information usually from buyers (i.e. large-scale agro-businesses) or other farmers whereas half of all GlobalGAP farmers were informed through NGOs or donors (Table 2). To our knowledge, GlobalGAP certification was intensively supported by US and German development aid and this picture

⁴ By stressing differences between statements and actions, they affirm that believing in what people say can be misleading (Manski 2004). Consequently, one rarely sees subjective data in empirical papers. We want to break with this tradition and compare our quantitative results with qualitative information about farmers' own statements on the subject. We are aware of the measurement errors that come with individual differences in interpretation of questions and expressions, and can thus not make accurate statements using this methodology.

may be the result. For both groups government extension services hardly ever (in 9% of all cases) relevant information providers.

| | Organic | GlobalGAP |
|------------------------|---------|-----------|
| Export agro-businesses | 42 | 14 |
| Government / Extension | 9 | 9 |
| NGO or donor | 12 | 50 |
| Other farmers | 30 | 24 |
| Relatives | 7 | 1 |
| Other | 0 | 1 |

 Table 2: How farmers first learned about the possibility to get organic / GlobalGAP certification in percent

Buyers and other farmers stress "hard" information (on prices, markets and yield), on certification, whereas NGOs and donors put the focus on "soft" information such as environmental hazards and safe handling. This is the outcome from feedback discussions with buyers and donors and is also reflected in the certification training material provided by those groups. Even more, it is also mirrored in the personal motivation that farmers stated for aiming at a particular certification. When asked in an open question for their motivation for certification, those informed by NGOs or donors stated far more often than those informed by agro-businesses that environmental concerns, health or food safety as determining factors whereas those informed by agro-businesses considered yields, prices and contracts most important (Table 3).

| | Informed by agro- business | Informed by NGO or donor |
|---------------------------------|-------------------------------|-----------------------------|
| Better yields | 11 | 10 |
| Better prices | 23 | 14 |
| Health or food safety reasons | 21 | 26 |
| Environmental concerns | 5 | 34 |
| Better contracts with exporters | 15 | 2 |
| Easier to sell | 7 | 5 |
| Cultural reasons / tradition | 1 | 0 |
| Customer demands | 16 | 11 |
| Other reasons | 1 | 1 |

Table 3: Stated motivation to become certified in percent

How might this be relevant for the rest of the certification process and even more for the success of the farmer-agro-business contract? According to our data, the quality of the relationship between farmer and agro-business, as subjectively perceived by the farmer, is significantly better in those cases where the agro-business provided the initial information (test statistic of two sided t-test is 2.77). Going further in the procedure, when the agro-business provided the initial information, it likely also organized the certification process and even paid for it (correlation of 0.6). In addition, in those cases where the exporter paid for the certification, farmers received on average double the amount of training than in all other cases. And the quality of the relationship is also perceived as significantly better when the agro-business organized the certification process (test statistic of two sided t-test is 6.11). For our case study specifically, the data shows that usually when Blue Skies is the buyer, they also organized and paid for the certification.

This result points towards the importance of integrating and engaging both partners early in the certification process in order to align expectations and build trust. This was confirmed in the discussions with both sides, with the key factors being building mutual trust. Disappointments in terms of wrong expectations or unreliability of the other party were mentioned as the main reasons for failures of contract schemes. This means that the ability of both certification and contract to deliver on the expectations it created will determine its success. As proclaimed in management theory, aligning expectations and building trust is important for longer-term success. Our case study of a successful agro-business below shows that Blue Skies puts particular emphasis in its farmer-relations management, on frequent and transparent communication and reliability on both sides.

3.2. Analysis of the firm factor

While the literature finds modest short run income and welfare effects which disappear quickly after the end of the contract, stronger beneficial effects of contract farming should manifest themselves primarily over the medium and long run in higher regular incomes and farm or asset growth. Long-term contract relationships allow for positive partner-specific investments on both sides such as on farm pack houses, planting of specific varieties, etc. Contracts last when both sides stick to each other. Some agro-businesses seem to manage these farmer relations much better than others, among them our case study firm Blue Skies. Table 4 shows that Blue Skies farmers are better off in several respects. They have a higher return on investment and a higher profit that is determined by higher revenues, not by lower costs. While we do not have a direct measure of the extent of use of state of the art farming technologies and the overall the level of use of fertilizer, mulch, and other productivity enhancing agricultural practices, we see that Blue Skies farmers use more good agricultural practices and organic farming techniques and this even though they did not receive more training. Training and support institutions named by the farmers are mostly government (mainly ministry of agriculture) and international donors. Training and support by firms mentioned was done by Blue Skies. Other exporters/processors are mentioned in less than 1% of the cases by those farmers selling to other agro-businesses. However, it appears that Blue Skies contract farmers receive slightly less training by other organisations (the difference is significant at 10%). This could be supply or demand driven. Bellemare (2012) and others argue that contract farming is a driver of farm modernization. However, we see here that there are huge differences between contract firms (all farmers in the sample produce under contract).

But Blue Skies farmers are also better off in another respect, which was identified as a crucial success factor in the previous section. Farmers producing for Blue Skies state to have a significantly better and more intensive relationship with their buyer, than all other farmers in the sample. This relationship also lasts for longer already, on average more than two years instead of less than one year⁵. Intensity is measured by whether or not they have the phone number of the buyer, the frequency of meetings, and how much they know about the further use of their pineapple (destination, processing). Whether the better relationship results in better economic outcomes or vice versa remains unclear. These correlations might not be causal. Therefore we have tried to verify these results through qualitative interviews.

In addition, selection for the "better" farmers may be an issue that affects some of these results. We tested some standard measures such as farm size, production costs, and experience and while there are no significant differences between Blue Skies farmers in

⁵ The sample was random and representative at the time of survey, which implies that there should be no differences in average contract duration if there is no "firm factor".

these respects, there may be other factors that we did not capture such as fruit quality and farmer reliability. The selection process is one of the main aspects we focused on the in the qualitative interviews.

| Variable | Definition | Blue Skies Farmers (N=71) | All other Farmers (N=282) | t-Stat. |
|--------------|--|---------------------------------|------------------------------------|----------|
| ROI | Return on investment in pineapple farming (one year) | 3.13 | 1.90 | 3.56*** |
| PRODCOS_KG | Production cost per kg fruit | 0.11 | 0.12 | 0.63 |
| REV_KG | Revenue GHG per kg fruit sold | 0.26 | 0.17 | 9.17*** |
| PROFIT_KG | Profit GHG per kg fruit sold | 0.15 | 0.06 | 5.21*** |
| TRAIN | Training received in last 5 years from exporters, NGOs, donors or ministry of agriculture | 14.82 | 17.96 | 1.03 |
| GAPPRACT | Number of good agricultural practices and organic farming practices used | 4.13 | 1.89 | 11.91*** |
| YEARS_BUYER | Number of years already selling to the same buyer | 2.42 | 0.97 | 10.62*** |
| REL_BUYER | Quality of relationship to buyer on a scale from 1 (very good) to 4 (very bad) | 1.31 | 2.34 | 10.66*** |
| | Details of the quality of the relationship between buyer and seller: | | | |
| PICKUP_BUYER | 1 if satisfied with delivery/pickup arrangements, 0 otherwise | 0.94 | 0.36 | 8.24*** |
| VOL_BUYER | 1 if satisfied with volumes bought by buyer, 0 otherwise | 0.76 | 0.15 | 7.00*** |
| BUY_GUARANT | 1 if guaranteed volumes bought, 0 otherwise | 0.83 | 0.26 | 10.08*** |
| TIME_PAY | Time lag from pickup to payment (1=same day, 5=3 months or more) | 2.91 | 3.14 | 2.25** |
| | Intensity of the relationship between buyer and seller: | | | |
| MEET_BUYER | Frequency of meetings between buyer and seller (times per year) | 10.65 | 5.96 | 5.38*** |
| PHONE_BUYER | 1 if phone number of buyer known, 0 otherwise | 0.68 | 0.20 | 5.09*** |

Table 4: Blue Skies farmers in comparison with other contract farmers

Significance levels: *: 10% **: 5% ***: 1%. We use a conversion factor of 1 Ghana Cedi (GHS) = 0.46 Euros (calculated on the basis of the exchange rate on January 12, 2010).

All agro-business firms in our sample have similar selection mechanisms for farmers in particular concerning minimum farm size and/or level of organization in groups. The common target of this selection mechanism is to find those farmers that produce good

quality in a reliable way at an acceptable distance to the firm. Because firms cluster in a small area, they target the same regions for supplier farmers. Nevertheless, because Blue Skies has a good reputation as buyer they might have the first choice in terms of supplier farmers. This was mentioned in particular by mango farmers who said "everyone here wants to supply to Blue Skies, because they are good, but they cannot take fruit from everyone". We asked the farmers directly in order to find out whether happier and - in economic terms - better farmers select into contract farming with Blue Skies or whether farming for Blue Skies made them better off and happier afterwards. As most farmers had experiences with other agro-business firms, they were able to compare. Farmers considered the secure and reliable long-term market and payment stream that Blue Skies is providing as the most important impact channel, especially when comparing to other buyers. Blue Skies is respected for its corporate culture of respect, social equality and openness up to the point that farmers imitate it themselves (Table 5). Several farmers mentioned their admiration for Blue Skies' management, especially related to mastering past market challenges, such as failures in export due to the ash cloud in island in 2010. Blue Skies is also respected for the quality of its advice and training to the farmers, which is, compared to others, much more targeted to their needs and takes up their suggestions and ideas (Table 5). In addition, Blue Skies, in partnership with two of its buyers Waitrose and Albert Heijn, supports community projects through a foundation. Projects are proposed by the farmers and owned by the communities. The Foundation manager at Blue Skies supports and overviews the implementation and visits each project regularly. The interviews showed, that the foundation is an important add-on because it gives Blue Skies and its farmers a good standing in the communities. We have randomly visited a number of projects. They have overall a real impact, are comparably well-managed because the needs are coming from and are prioritized by the communities, responsibility is with the farmers, there is a well thought-out management system and Blue Skies is consistently monitoring projects over a long time period. They are judged as important by the farmers, but nevertheless second to a stable market (Table 5).

Table 5: Most important impact channels from the perspective of the farmers in descending order

| Reliability and consistency | "Blue Skies is the most reliable buyer and always pay everything and on time. Prices are fair and we are told about quantities in advance. And there are additional incentives that other buyers do not provide." |
|-----------------------------------|---|
| | "Other exporters were not reliable." |
| | "Sometimes we expect to sell more but we understand it is because of the orders that Blue Skies receives from their customers. We stay with Blue Skies because it is reliable and we can constantly supply them. There is no other consistent buyer in Ghana. " |
| | "I would prefer to sell to Blue Skies even if I get a higher price elsewhere." |
| Volume | "We sell almost all our fruit to Blue Skies. And we would sell more. We want to expand the farm and improve housing for workers if we are able to sell more." |
| Corporate culture | "We feel that we are all part of the Blue Skies family. We can openly discuss our problems and complaints with the agronomy team. Aspiring farmers are built up to succeed by Blue Skies. We admire how they manage, especially in difficult times." |
| Training | "The constant training from Blue Skies is very beneficial. They visit us every 2-6 weeks for audits and trainings that cover amongst others certification, cropping, farm management. We also ask for advice with current prevalent problems. They take our concerns seriously. " |
| Credit | "We would like to receive a loan for the expansion of the farm. We cannot get it from Blue Skies and the banks are not helping either. They have very high interest rates and demand huge collateral. But on an individual basis, needs are considered. We can get soft loans (without interest) as advance payment. We know that we can count on Blue Skies that they will do their best." |
| Community projects | "I was very involved in getting the Foundation project in my community. I am now also in the management committee. " |
| | "We are applying to the Foundation to get a Junior High School (JHS) to our community. But more important, is more demand for fruit. " |

The management of problems and difficulties by Blue Skies was particularly mentioned by several farmers. There are not only successful examples. We provide a characteristic example from the interviews. The typical organic Sugarloaf pineapple farmer has been growing Sugarloaf for many years and has been with Blue Skies from the beginning of their

operations. He emerged from a poor family background. His farm is comparably small, but has grown considerably over time together with Blue Skies. Pineapple production is his family's only income source. He sells about 50% of his fruit to Blue Skies. The rest of his harvest is sold at a lower price on the local market. This is the only alternative market for him. The additional income from selling to Blue Skies not only helped him to increase his farm size, but also to send his children to better schools and to invest in a taxi as additional off-farm business. However, in the past few years, the demand for Sugarloaf from Blue Skies has decreased and become unstable. Many farmers, especially the smaller ones, had to leave Blue Skies and are now selling exclusively on the local market or switched to staple crops. To try to counter this trend, Blue Skies is actively promoting the Sugarloaf variety among its customers as well as trying to find new customers for Sugarloaf. They are supporting farmers in testing new farming techniques, e.g. using plastic mulch, while being careful not to induce high expectations that they cannot meet. While the farmer is not happy with the low demand, he understands the demand situation and respects Blue Skies for its efforts.

We conclude that the satisfaction of Blue Skies farmers and their economic success is at least in a considerable part due to the way that Blue Skies treats its farmers and not due to selection effects. But does this also benefit Blue Skies, i.e. is it a win-win situation? Without being able to establish causality, we observe that Blue Skies has had its operations in Ghana since 1998, over time considerably increasing in size. During this period, many others have failed (e.g. *Coastal Groves, Kingdom Fruit Juice, Nsawam Cannery, Athena*) or remained much smaller (e.g. *Peelco, WAD*).

As a next step, we try to understand the corporate causes behind the big difference between Blue Skies farmers and other contracted farmers that we found in the farmer survey and in the qualitative interviews. We benchmarked Blue Skies with other similar firms. A list of firms used for the benchmarking can be found in Appendix A. In particular, we looked at three points: smallholder orientation, prices and corporate social responsibility. While Blue Skies does not differ significantly from other agro-businesses in terms of buying practices and corporate social responsibility, it differs in terms of soft factors⁶. Reliability and consistency, corporate culture and training and were identified as most important impact channels by the farmers (Table 5). We hence contoured the main factors within Blue Skies by reviewing their policies and observing their actual behavior in day-to-day business.

Figure 2: The Blue Skies business model at a glance

The Joint Effort Enterprise (JEE) is the Blue Skies model for a sustainable business. It is built upon three strands:

| | | \$ |
|--------------------------|--------------------------|-----------------------------|
| Employing people from | Respecting people | <u>Operating profitably</u> |
| different backgrounds | equally | <u>and efficiently</u> |
| and cultures | because we believe that | because we know that we |
| because we believe that | if we respect each other | cannot continue to |
| we will generate better | for who we are, then we | produce the best fruit |
| ideas if we have a | will feel happier about | products in the world |
| diverse range of skills, | our work and proud to do | unless we generate the |
| experience and | a good job. | funds that will enable us |
| perspectives. | This is our culture. | to survive and grow. |

Source: adapted from an official Blue Skies presentation and from the company's website (<u>http://blueskies.com/page.aspx?id=1&page=41</u>)

First is the strong investment in building up a long-term supplier base. Blue Skies invests more care than other firms in order to foster good working relationships with its farmers. The agronomy department is comparably large and well equipped. 15 people take care of

⁶ In addition, but not the focus of this paper, but highly relevant for the overall local impact of Blue Skies is its principle of value adding at source. This principle translates into local employment opportunities in Ghana and up to 70% of the production value stays in the country, compared to about 15% when processing takes place outside Ghana.

the permanent suppliers, dealing with training, certifications, audits, quality assurance, crop planning, etc. Farmers also receive individual assistance and access to subsidized inputs such as compost. Extension workers know "their" farmers personally and treat them on an equal basis. They encourage farmers to think in an entrepreneurial way taking their thoughts and ideas seriously. At the same time, Blue Skies invests heavily in high quality training of its farmers and staff. This way they gain confidence, skills and experience, while Blue Skies gains a good reputation as buyer. Second is the active practice of the strong corporate culture and undisputable values implied by the business model summarized in Figure 2. These are lived in day-to-day business practice with the management acting as role models. The Blue Skies culture is based on mixing people from diverse backgrounds minimizing hierarchies and visible distinctions between people. On the social side everyone is treated equally and with respect. Management is based on trust and peer pressure, which is unusual in Ghana, where it is usually based on supervision. This culture creates a strong identification with Blue Skies among farmers. It also implies that those who do not fit in leave voluntarily. The third success factor is reliability. Blue Skies behaves in a protective way towards its farmers and surrounding communities, trying to buffer them against market volatilities, while transparently communicating own challenges. This combination of protection and open communication creates a trustworthy and resilient relationship between suppliers and Blue Skies. In summary, our case study shows that three "R" - reliability, reputation and respect - constitute the basis for contract relationships that benefit both sides.

Conclusion

With increasing relevance of certification standards such as GlobalGAP, organic and Fairtrade and associated contract relationships between exporters and smallholders, many researchers have analyzed the income and welfare effects of such arrangements. But they have so far neglected the role of certification as a structural element driving contract outcomes, as well as the role of individual firm behavior in shaping impacts. This paper shows that certification is an agent of change in farmer–agro-business relations. Because it requires a large upfront investment in terms of certification cost, training and changes in farm management and involves a considerable time lag between decision to invest and first

benefits, aligning expectations of farmers and buyers (i.e. agro-businesses) and building trust between the partners is crucial for the success of the whole process. Some agrobusinesses are more successful than others in managing the required kind of trustful and strong relationship with their contracted smallholders. This means that individual firm behavior matters more than taken into account in previous research both before certification (expectations) and after (income effects, personal satisfaction). Our case study of Blue Skies shows that three "R" - reliability, reputation and respect - constitute the basis for contract relationships that benefit all. Successful firms manage to establish a joint corporate culture among their staff and contract farmers and buffer risks of international market volatility while demanding high quality and reliability. Given that beneficial effects of smallholder agro-business relationships primarily show up in the longer run in the form of recovered investment and higher regular incomes, individual firm management is crucial. Standards linked with contracts are short-run agents of change, the individual firms determine whether they translate into long-run success. Future research would benefit from calculating survival rates of agro-business - smallholder contracts and link them to economic benefits. For supporters of certification processes, be it NGOs, donors, or agrobusiness firms, this means that more importance should be placed on longevity of contracts as opposed to and to "soft" factors such as trust building and forming a joint culture in addition to "hard" facts such as market opportunities and requirements.

Literature

- Barrett, C., Bachke, M., Bellemare, M., Michelson, H., Narayanan, S., & Walker, T. (2012). Smallholder participation in contract farming: Comparative evidence from five countries. World Development, 40(4), 715–730.
- Bellemare, Marc F. (2012). As You Sow, So Shall You Reap: The Welfare Impacts of Contract Farming. World Development, 40 (7), 1418–1434.
- Beuchelt, T. & Zeller, M. (2011). Profits and poverty: Certification's troubled link for Nicaragua's organic and fairtrade coffee producers. Ecological Economics, 70(7), 1316-1324.
- Bolwig, S., Gibbon, P., & Jones, S. (2009). The economics of smallholder organic contract farming in tropical Africa. World Development, 37(6), 1094–1104.
- Fold, Niels and Katherine V. Gough (2008). From smallholders to transnationals: The impact of changing consumer preferences in the EU on Ghana's pineapple sector. Geoforum, 39, 1687-1697.
- Henson, S., Masakure, O., & Crandfield, J. (2011). Do Fresh Produce Exporters in Sub-Saharan Africa Benefit from GlobalGAP Certification? World Development, 39(3), 375-386.
- ITC (2011). The Impacts of Private Standards on Producers In Developing Countries. International Trade Center Literature Review Series on the Impacts of Private Standards, Part II, Geneva.
- Kleemann, L., Abdulai, A. and Buss, M. (2014). Is Organic Farming Worth its Investment? The Adoption and Impact of Certified Pineapple Farming in Ghana. *World Development*, 64: 79–92.
- Kleemann, L. and Abdulai, A. (2013). Organic Certification, Agro-Ecological Practices and Return on Investment: Evidence from Pineapple Producers in Ghana. *Ecological Economics*, 93: 330-341.
- Maertens, M., & Swinnen, J. F. M. (2009). Trade, Standards, and Poverty: Evidence from Senegal. World Development, 37(1), 161-178.
- Manski, Charles F. (2004). Measuring Expectations. Econometrica, Vol. 72, No. 5, pp.1329–1376.
- Miyata, Sachiko, Nicholas Minot and Dinghuan Hu (2009). Impact of Contract Farming on Income: Linking Small Farmers, Packers, and Supermarkets in China. World Development, 37(11), 1781-1790.
- Schuster, M., & Maertens, M. (2013). Do private standards create exclusive supply chains? New evidence from the Peruvian asparagus export sector. University of Leuven, Department of Earth and Environmental Sciences Division of Bioeconmics, Bioeconomics Working Paper Series Working Paper 2013/1.

- Subervie, J., & Vagneron, I. (2013). A Drop of Water in the Indian Ocean? The Impact of GlobalGap Certification on Lychee Farmers in Madagascar. World Development, 50, 57-73.
- Warning, Matthew and Nigel Key (2002). The Social Performance and Distributional Consequences of Contract Farming: An Equilibrium Analysis of the Arachide de Bouche Program in Senegal. World Development, 30(2), 255-263.

Appendix

A - Other companies analyzed for benchmarking

- Athena: <u>http://images.businessweek.com/ss/08/11/1124_africa_entrepreneurs/11.htm</u>
- Bakkavor (Spring Valley Foods): <u>http://www.bakkavor.com/where-we-operate/a-to-z-locations/south-africa/spring-valley-foods.aspx</u>; <u>http://www.foodmanufacture.co.uk/Business-News/Bakkavor-sells-South-African-fruit-business</u>
- Bomarts: <u>http://www.bomarts.com/</u>
- Cadbury: <u>https://www.cadbury.co.uk/</u>
- Cargill: <u>http://www.cargill.com/worldwide/ghana/index.jsp;</u> <u>http://www.cargill.com/connections/more-stories/ghana-rural-education/index.jsp</u>
- Coastal Groves: <u>http://allafrica.com/stories/200402090827.html</u>
- Divine Chocolate: <u>http://www.divinechocolate.com/</u>
- Florette: <u>http://www.florette.com/</u>
- HPW: <u>http://hpwghana.com/</u>
- International Produce Limited (IPL): <u>http://www.ip-limited.com/pages/products.cfm</u>
- In2Foods: <u>http://www.in2food.co.za/Everyday-We-Show-We-Care.aspx</u>
- ORGANIC AFRICA: <u>http://organicafrica.biz/</u>
- Kingdom Fruit Juice
- Kuapa Kokoo: <u>http://www.kuapakokoo.com/</u>
- Nature's Way: <u>http://natureswayfoods.com/</u>
- Nsawam Cannery: <u>http://www.ghanabizmedia.com/ghanabizmedia/january-2011-bulletins/181-nsawam-cannery-resumes-operations.html</u>, <u>http://www.21food.com/showroom/11707/aboutus/nsawam-cannery-products-company-limited.html</u>
- Orchard House Foods: <u>http://www.ohf.co.uk/</u>
- Peelco: <u>http://peelcofruits.com/</u>
- PINDECO: <u>http://www.freshdelmonte.com/company-business-divisions-dis-</u> centers-cental.aspx
- Tropical Fresh: <u>http://www.tropicalfresh.com.br/</u>
- Vezet: <u>http://www.vezet.nl/</u>
- WAD: <u>http://www.wadco.ch/</u>