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Anette Ruml
Matin Qaim

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Smallholder farmers' dissatisfaction with contract schemes in spite of economic benefits: Issues of mistrust and lack of transparency

Anette Ruml [1],* and Matin Qaim [1]

[1] University of Goettingen, 37083 Goettingen, Germany

* Corresponding author: Anette Ruml; University of Goettingen; Heinrich-Dueker-Weg 12; 37073 Goettingen; Germany; Email: anette.ruml@uni-goettingen.de; Tel: +49551-3920212

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Abstract

Contract farming is typically seen as a useful mechanism to help smallholders. However, despite economic benefits, high dropout rates from contract schemes are commonplace. We use data from Ghana to show that smallholders benefit from a resource-providing contract in terms of higher yields and profits, but most of them still regret their decision to participate and would prefer to exit if they could. The main problem is insufficient information from the company. Farmers do not understand all contract details, which leads to mistrust. We argue that lack of transparency may explain high dropout rates in Ghana and other situations too.

1. Introduction

Contract farming describes an arrangement between a buying company and a selling farmer in which the terms of the sale are specified in advance (Grosh, 1994). It is an institutional response to the high risks and uncertainties in spot markets, which are often characterized by significant market failures. Contract farming can reduce these risks and uncertainties, and thus incentivize increased smallholder investments, leading to higher productivity and income (Eaton and Shepherd, 2001; Key and Runsten, 1999; Simmons et al., 2005). Therefore, contract farming is often seen as a useful tool for poverty alleviation and rural development (Bellemare and Lim, 2018; Otsuka et al., 2016; Wang et al., 2014). It is also seen as an efficient mechanism to link smallholder farmers to high-value supply chains (Nguyen et al., 2015).

The question whether contract farming is really beneficial for smallholder farmers has long been a subject of debate. One strand of literature raises concerns that contract farming leads to the exploitation of unpaid family labor and land (Clapp, 1994; Little and Watts, 1994), and to the overexploitation of the farmers' natural resources (Bijman, 2008). It is argued that contracts create unequal power relations, due to the monopsonistic nature of the company (Clapp, 1994; Little and Watts, 1994; Morrison et al., 2006; Oya, 2012). It is also argued that contracts lead to a loss of farmers' autonomy, unequal gender relations (Bijman, 2008), and changes in social behavior (Adams et al., 2018).

A second, mostly empirical strand of literature provides evidence on positive effects of contract farming on production and household welfare. From an economics perspective, farmers with a contract typically benefit through higher yields (Brambilla and Porto, 2011; Champika and Abeywickrama, 2014; Hernández et al., 2007), revenues (Bolwig et al., 2009; Cai et al., 2008; Jones and Gibbon, 2011; Kalamakar, 2012; Tripathi et al., 2005; Wainaina et al., 2012), profits (Islam et al., 2019; Kumar and Kumar, 2008; Kumar et al., 2019; Mishra et al., 2016; Narayanan, 2014; Tripathi et al., 2018), and incomes (Andersson et al., 2015; Ashraf et al., 2009; Bellemare, 2012; Cahyadi and Waibel, 2016; Ito et al., 2012; Khan et al., 2019; Maertens and Swinnen, 2009; Maertens and Vande Velde, 2017; Miyata et al., 2009; Rao and Qaim, 2011). A recent analysis of the existing empirical results showed that positive

productivity effects were found in 92%, and positive income effects in 75% of the cases (Wang et al., 2014)[1].

However, in spite of positive income effects of contract farming in many situations, high smallholder dropout rates from contract schemes are often observed (Andersson et al., 2015; Euler et al., 2016; Gatto et al., 2017; Minot and Ngigi, 2004; Minot and Sawyer, 2014; Narayanan, 2013; Narayanan, 2014, Ton et al., 2018). One reason for dropouts is that smallholders violate the contract conditions or are unable to consistently meet the quality requirements. However, there are also cases where farmers simply seem to be dissatisfied (Andersson et al., 2015; Gatto et al., 2017; Ochieng et al., 2017). Thus, the debate around the development potential of contract farming is ongoing and requires additional research on potentials and constraints beyond narrowly defined economic indicators. In particular, farmers' satisfaction with contract farming is not yet sufficiently understood, but is important to reduce dropouts and facilitate lasting partnership between smallholder farmers and agribusiness companies.

The objectives of this paper are to analyze concerns about farmers' satisfaction with contract farming and to illustrate that economic benefits are insufficient to explain farmers' perceptions and dropout behavior. We use an interesting empirical example to underline the importance of social aspects related to trust and transparency for the longer-term success of contract schemes. The example is a resource-providing contract between a large processing company and smallholder oil palm producers in Ghana. The contract scheme can be considered a success from an economics perspective. Previous work showed that oil palm farmers with a contract benefit substantially in terms of higher production investments, crop yields, and household incomes (Ruml and Qaim, 2019a; Ruml et al., 2020). Despite these economic gains, we show here that most farmers regret their decision to participate in the contract scheme and would like to exit the scheme as soon as legally possible. In other words, clear economic improvements notwithstanding, farmers are deeply dissatisfied with the contract.

This example provides an interesting opportunity to investigate problems with contract farming that have not yet received sufficient attention in the literature. Based on insights

[1] However, there may be a certain publication bias in the literature on contract farming, with positive results having a higher likelihood of being published than negative results (Ton et al., 2018). A recent study with representative data from six developing countries showed that contract farming had significantly positive income effects in only three of the six countries (Meemken and Bellemare, 2020).

derived from focus group discussions with farmers and a structured survey, we examine the relationship between the contracting company and the farmers in order to highlight the importance of information, contract understanding, and transparency. We find that these aspects are crucial for farmers' satisfaction and might explain their dropout behavior.

In particular, we provide statistics on the self-reported information farmers had about the contracts when signing it and their level of contract understanding. The results challenge the common assumption that farmers rationally self-select into contract schemes and are enabled to make informed decisions about their production investments through proper information provided by the company. We also analyze problems that arise if farmers – due to limited contract understanding – perceive the company's actions as opportunistic. While the specific results relate to the case of the oil palm contract in Ghana, comparison with other examples from the literature suggests that similar problems of mistrust and lack of transparency also occur in many other contract schemes in various developing countries. Our results may encourage follow-up research to investigate the benefits and challenges of contracted smallholders beyond narrowly defined economic indicators.

2. Case study

2.1. *The Ghanaian oil palm sector*

Oil palm is native in Ghana and palm oil is a crucial part of the local diet. Traditionally, farmers manually process the harvested fruit bunches into palm oil, to consume it or to sell it to other households on the local market (Byerlee et al., 2017). In recent decades, oil palm has gained in importance for the food and cosmetics industry, and the local demand substantially increased (Huddleston and Tonts, 2007). As a response, the Ghanaian government incentivized a diversion away from citrus fruits and cocoa towards oil palm, which is by now one of the most important cash crops produced in the country (Rhebergen et al., 2016). Several national and international companies have established large processing mills with own plantations and contractual agreements with smallholders to meet the high demand and to run at full processing capacity.

2.2. *The contract farming scheme*

One of the contract farming schemes in the Ghanaian oil palm sector is the Twifo Oil Palm Plantation (TOPP), owned by Unilever. In addition to the 10,000 acres of company

plantation land, Unilever sources oil palm from approximately 1000 oil palm farming households through contractual agreements. The contracts are offered in selected villages, with the village chief as intermediary between the farmers and the company. Unilever states that they accept all farmers that have land available for cultivation and are willing to accept the contract terms. The company is the only large buyer of oil palm fruit bunches in this region. Although farmers are able to sell small quantities on the local market, they are unable to sell larger quantities outside of the company contracts. Thus, side-selling is a rare phenomenon and Unilever enjoys a monopsonistic position.

The contracting unit is the individual oil palm plot. The company sources all output produced on the contracted plots at an annually fixed price without any quality restrictions. They pick up the harvested oil palm fruit bunches at the farm gate with trucks in intervals of 2-3 weeks. The contracted oil palm plots are established by Unilever on credit. The company assists farmers with the planting materials, other inputs, machineries, and labor during the planting phases. The size of the credit depends on the inputs and services used. The credits plus an annual interest rate of 11.5% are paid back by farmers through the output supply: 25% of each harvest is taken by the company without payment. The credits are typically repaid over a period of 20-25 years. Throughout this period, farmers can additionally demand inputs, such as agrochemicals, tools, machinery, and labor, also on credit. These extra credits are not included in the initial agreement and are additionally deducted from the harvest. After the plot is established, farmers make their own decisions regarding input use and intensities. The company only supplies those inputs on credit that the farmer demands.

2.3. *Sample and previous findings*

We randomly sampled 13 villages from a complete list of contract villages provided by Unilever. Within these 13 villages, the local interviewer team compiled full lists of all contracted households with at least one plot registered with Unilever. From these lists we randomly sampled and interviewed 75 percent of the households in each village. Overall, our sample includes 164 households, with 169 independent oil palm farmers that answered the questions discussed here (in a few households more than one farmer had a contract).[2]

[2] In previous studies about the economic impacts of the contract scheme we additionally sampled 193 households producing oil palm under simple marketing contracts (without credit and input provision) and 106 oil palm producers without any contract. However, these additional households were sampled in different regions.

Table 1 presents farm, farmer, and household characteristics of the households in our sample. The average farm size is around 20 acres, even though 30 percent of the households actually have less than 10 acres of land. The average area under contract is 8 acres. Most contracted farmers are male. On average, farmers are 56 years old, have 7 years of formal education, and 16 years of experience in oil palm cultivation. Most households have been under contract for 8-10 years. Prior to the contracts, only 45 percent of the households cultivated oil palm commercially (beyond just small quantities for home consumption). However, nowadays 21 percent also cultivate oil palm on independent plots, beyond the contracted ones. In addition to oil palm, households grow other cash crops such as cocoa and rubber and food crops such as cassava and maize.

Table 1: Farm, farmer, and household characteristics

	Mean	Std. Dev.
Farmer(n = 169) and household (n=164) characteristics		
Gender (female = 1)	0.31	(0.46)
Age (in years)	55.94	(12.18)
Education (in years)	6.80	(4.66)
Experience (in years)	15.63	(9.54)
Number of household members	5.20	(2.60)
Number of adult household members (above 18)	2.85	(1.30)
Number of youth household members (>14 and <18)	0.49	(0.71)
Number of child household members (<14)	1.86	(1.72)
Commercial oil palm production prior to contract farming (yes = 1)	0.45	(0.50)
Independent oil palm production (yes = 1)	0.21	(0.41)
Years under contract	9.34	(1.02)
Farm characteristics (n= 164)		
Total land availability (in acres)	19.94	(18.70)
Small-scale farmers (<10 acres)	0.30	(0.46)
Medium-scale farmers (10 – 19 acres)	0.37	(0.48)
Large-scale farmers (>20 acres)	0.33	(0.47)
Land purchase since contract participation (in acres)	4.34	(7.40)
Absolut area under oil palm cultivation (in acres)	9.36	(9.83)
Relative area under oil palm cultivation	0.51	(0.24)
Area under contract (in acres)	7.67	(6.93)
Number of other cash crops produced	2.40	(0.81)

Previous analyses of the data found that the Unilever contract increases the adoption of chemical fertilizers and herbicides and leads to a doubling of oil palm yields. Contracted households expanded their commercial production and became more specialized on oil palm (Ruml and Qaim, 2019a). Results also show that the contract significantly reduces agricultural labor use per acre of oil palm, due to the adoption of labor-saving technologies and because

For details on sampling and identification strategy, please see (Ruml and Qaim, 2019a; Ruml and Qaim, 2019b; Ruml et al., 2020).

post-harvest handling and processing of the fruit bunches no longer take place at the individual farm. These labor savings also lead to a reallocation of household labor to off-farm economic activities (Ruml and Qaim, 2019b). Finally, the data show that the contract leads to a strong increase in oil palm profits (140%) and total household incomes (70%) (Ruml et al., 2020).

2.4. *Farmer satisfaction*

The resource-providing contract in Ghana's oil palm sector leads to sizeable economic benefits for farmers, which is consistent with most studies on the effects of contract farming in developing countries. Thus, from an economics perspective, this contract can be considered a success. However, building on information collected through focus group discussions, we expanded the survey questionnaire to also capture data beyond purely economic outcome measures. In particular, we asked all farmers in the sample two questions related to their satisfaction. First, we asked whether they would sign the contract again, if they had the chance to go back in time. The purpose of this question was to see whether farmers regret signing the contract in the first place. If this question was answered with no (they would not sign the contract again), we asked them for specific reasons. Second, we asked the farmers if they would sign the contract again in the future, after the current contract expires, if the contract remained unchanged.

Mean values of the farmers' answers to these questions are shown in Table 2. Only 43 percent of the farmers do not regret signing the contract and would sign it again in the same situation. Hence, more than half would not sign the contract again and state several reasons. The most often mentioned reason relates to unfair contract terms, which indicates that farmers were unaware of the true contract features prior to signing the contract. In particular, many farmers consider the output prices too low, and the interest rates and input prices too high. These answers indicate that farmers did not make informed and rational choices when they signed the contract.

Moreover, many farmers criticize the lack of transparency and honesty of the company. Throughout the interviewed villages, farmers often reported that the company enters the farmland without informing the farmer. The output and input prices and related calculations and deductions are perceived as not transparent. In some cases it was reported that the company harvested a plot without prior knowledge of the farmer. Moreover, some

farmers feel deceived because the initial information they received from the company was incomplete and the initial promises made were not met. On the other hand, the farmers do not necessarily see the benefits that they get from the contracts. While they know that they are generally better off today than 10 years ago, they do not know how their situation would have developed had they not signed the contract.

Table 2: Contract satisfaction

n = 169	Yes	No	Share (std. dev.)
If you had the chance to go back in time, would you sign the contract again?	73	96	0.43 (0.50)
Why would you not sign the contract again?			
Unfair contract terms		90	
Too low output prices		51	
Interest rates are too high		28	
Too high input prices		18	
Lack of transparency and honesty		11	
Initial set-up is too expensive		2	
After this contract ends, would you sign up for another one, assuming the contract terms are unchanged?	65	104	0.38 (0.49)

Considering the widespread criticism, it is not surprising that only 38 percent of the farmers plan to sign an additional round of the same contract in the future (Table 2). Whether farmers will really not sign in the future and drop out of the scheme cannot be observed at this point. The scheme is in its first round of contracting, and the current contracts will still continue for another 10-15 years. A simple "no" response to the second question could also indicate that farmers would not require the contractual support any longer. This was reported, for instance, in connection with contract schemes in Thailand, India, and Indonesia (Euler et al., 2016; Narayanan, 2013). In those cases, farmers became wealthier through many years of contract farming and could afterwards expand their plantations also without additional support. In some cases, they also started investing into other businesses outside of agriculture (Narayanan, 2013).

These examples from other countries suggest that not signing a contract again is not necessarily an indicator of dissatisfaction. However, in our case the level of dissatisfaction is quite obvious through the combination of answers to the two questions we asked. Our data show that only a very small fraction of those who stated that they would not sign a new contract do not regret signing the current contract. Furthermore, Table 3 shows that neither

regretting to have signed the contract nor not being willing to sign a new contract is significantly correlated with household income. Hence, we conclude that the dissatisfaction is not primarily driven by objectively measurable economic indicators.

Table 3: Pearson's correlations between contract satisfaction and household income

	Per capita household income (in GHS)
If you had the chance to go back in time, would you sign the contract again?	0.0794
After this contract ends, would you sign up for another one, if the contract terms remained unchanged?	0.0686

Note: None of the correlation coefficients is statistically significant.

In the following, we discuss two particular issues raised by the farmers in more detail and put these issues into the context of the existing literature on contract farming. First, we discuss and further investigate the (incomplete) information and contract understanding of contracted farmers, to challenge the common assumption that farmers rationally self-select into contract farming and are enabled to make informed decisions regarding their production investments. Second, we discuss the importance of transparency and trust by looking at the example of fruit bunch weights, where farmers often feel deceived by the company.

3. Incomplete information and contract understanding

It is widely assumed that participation of farmers in contract farming schemes is the result of an expected cost-benefit analysis that considers both production and transaction costs for the independent production, as well as the production under contract (Simmons et al., 2005). Thus, farmers self-select into contract farming if their expected utility is higher under contract (Barrett et al., 2012; Bellemare, 2012). In order for this decision to be rational, it needs to be based on information of input and output prices to determine production costs, as well as on contract conditions to determine transaction costs. Farmers also require cost and price information to make optimal decisions on production investments. If farmers lack this information, they potentially over-utilize or under-utilize production inputs. In the existing literature, farmers were sometimes found to lack this information under contract farming. They are often unaware of input prices, contract conditions, the exact company they signed the contract with (Simmons et al., 2005), or the company's policies (Porter and Phillips-Howard, 1997). Particularly written contracts can be problematic, as they lack transparency when phrased in a language that is inaccessible to farmers (Cahyadi and Waibel, 2016).

Based on the concrete complaints raised by our sample farmers in Ghana we investigate the information and understanding that they had about the contract at the time of the survey and prior to signing the contract (Table 4). The contracts the farmers signed were written in English, included several lengthy clauses, and a cost and repayment schedule. The results show that only 28 percent of the farmers in the sample speak and read English, meaning that 72 percent of the farmers were unable to even read the contract before they signed it. The problem of insufficient or inaccessible information is also supported by the fact that only 32 percent of the farmers reported that they actually understood the contract prior to signing it.

Table 4: Information and contract understanding

n = 168	Yes	No	Share (std. dev.)
Self-reported understanding of English	48	121	0.28 (0.45)
Self-reported understanding of contract	54	115	0.32 (0.47)
Test question understanding of contract breech (take-over of plot by company in case of delayed output supply)	146	23	0.86 (0.34)
Test question understanding of contract duration (responsibility of heir in case of farmer death)	168	1	0.99 (0.08)
Knowledge of the initial credit size	37	132	0.22 (0.41)

We further asked two test questions to check the farmers' knowledge about distinct contract characteristics. First, the contract specifies that after a certain delay in output supply (more than 6 weeks) the company has the right to take over the oil palm plot. The take-over means that the company decides on all input applications and provides all the labor required to cultivate the plot. The farmer loses decision-making power, is not allowed to work on the plot anymore, and receives no payment until the debt is repaid in full. Eighty-six percent of the farmers were aware of these consequences at the time of the survey (Table 4). However, further discussions with the farmers suggest that this was not widely understood before signing the contract. Instead, farmers learned this through experience. Several actually faced such "expropriation", and this information spread widely also among surrounding households and villages. Second, the contract specifies that if the farmer deceases during the time of the contract duration, the contract would either be continued by the heir, or the plot would be taken over by the company until the debt is repaid in full. Except for one farmer, all farmers

in the sample were aware of this contract condition. Yet, further discussions with the farmers revealed that many are unaware that the family of the deceased has to provide a death certificate, which is untypical and difficult to get in the local setting. We learned about one case where the death of the farmer was not confirmed through a certificate and the company consequently took over production on the plot, denying the widow access to the plot and payments from the harvest.

The last row in Table 4 shows that only 22 percent of the contracted farmers are aware of the amount of the initial credit they are currently paying off. As described, the company provides assistance in the form of labor, planting material, agrochemical inputs, and machinery to establish the oil palm plantation on the contracted plot. The resulting credit is then paid back over 20-25 years following the plantation establishment through 25% of each harvest. This credit is not a fixed amount that is equal across all contracted farmers, as it depends on the types of assistance and inputs required by an individual farmer. Seventy-eight percent of the farmers in our sample were unaware of the amount of these charges and thus could not make a rational and informed decision on how much and what type of assistance and inputs to use. Further, they could not weigh the value of the assistance and inputs received on credit against the actual value of the later repayment in terms of oil palm fruit bunches. For the 22% of the farmers who reported their initial amount of credit, we cannot check whether the amount was estimated correctly, as Unilever did not provide information to cross-check.

This combination of easy access to credit and lack of information and transparency has also been reported elsewhere and increases the risk of indebtedness for farmers (Bijman, 2008). Farmers do not know how much they owe, and how long it will take them to pay back this debt. As a response to this lack of transparency, several farmers reported that they had applied for a credit at a formal bank, in order to pay back Unilever at once and then exit the contract. However, Unilever did not allow such one-time repayment, so that many farmers feel locked into the contract scheme with too limited information on actual contract conditions. This happens when contracts seem attractive in the beginning and farmers sign long-term agreements involving large debts without having full information (Glover, 1987). Such situations increase the risk of default with the consequence that farmers may have to sacrifice the autonomy over their land and also lose the opportunity to sell any output to the

company (Key and Runsten, 1999). This is particularly problematic if farmers are highly specialized on the contracted crop and the firm has a monopsony in the region, as in our case.

4. Transparency

One concern raised in the existing literature on contract farming is the potential monopsony power of the contracting company. This monopsony power makes farmers more dependent and vulnerable to the contractor (Cai et al., 2008; Eaton and Shepherd, 2001) and as such, it generates an asymmetric power relation between the two parties (Adams et al., 2018; Key and Runsten, 1999; Morrison et al., 2006). If the farmers can only sell to this particular company, the company can execute power by stopping or rationing the procurements, for instance in times of supply abundance (Glover, 1987; Huacuja, 2006) or low market prices (Bijman, 2008).

Monopsony power is particularly problematic if farmers perceive the actions of the company as opportunistic, because the farmer is powerless towards this behavior. Evidence in the existing literature includes reports about the manipulation of quality standards and reductions in the price received or the quantity weighed (Eaton and Shepherd, 2001; Glover, 1987; Huacuja, 2006; Ochieng et al., 2017; Singh, 2002). Frequently reported examples of the perceived execution of the company's monopsony power are reported weighing losses as a result of long waiting hours at either the farm or the company gate. Farmers often have to wait until the harvest is picked up or received by the company, leading to weight losses due to water evaporation. This way, the farmer is paid for less than what was actually delivered, in addition to potential spoilage during waiting times (Glover, 1987).

Table 5: Descriptive statistics of perceived weighing losses

	Number of farmers	Share	Std. Dev.
Experienced at least one weighing loss	59	0.37	(0.48)
Ability to estimate this loss	30	0.49	(0.50)
Average estimated loss (in tons)	30	4.87	(5.57)

For our case of oil palm farmers in Ghana, we find that 37 percent of the farmers in the sample (59 farmers) experienced such a weight and weighing losses (Table 5). Out of the 59 farmers, 30 were able to estimate the quantity of the loss in tons. The average stated loss within the 12 months prior to the survey is approximately 5 tons, which is equivalent to 77

percent of the average annual yield per acre (Ruml and Qaim, 2019a). Some farmers further claimed that the quantities the company paid for were less than what they had actually delivered, which has also been reported elsewhere (Huacuja, 2006; Ochieng et al., 2017).

These actions are not necessarily opportunistic, because differences in farmers' estimates and actual weights can always occur, but distrust and lack of transparency can easily lead to perceived unfairness, which is then hard to prove or disprove (Glover, 1987; Rist et al. 2010). Some contract schemes do not allow the farmers to be present at the time of the weighing or grading (Huacuja, 2006), which further decreases transparency and raises the farmers' suspicion and mistrust (Eaton and Shepherd, 2001; Saenger et al., 2014; Schipmann and Qaim, 2011). In the sweet potato supply chain in the Philippines, the price setting of contractors is largely intransparent and farmers perceived it as unfair. Yet, examinations of the price margins revealed that the companies are actually not acting opportunistically (Batt and Cadilhon, 2007). Similarly, the weighing losses can be a result of imperfect harvest logistics, which cause dissatisfaction among farmers (Isager et al., 2018).

Table 6 shows for our sample of oil palm farmers in Ghana that the experience of at least one perceived weighing loss during the last 12 months is negatively correlated with the stated willingness to sign a new contract in the future. Hence, lack of information and transparency, distrust, and dissatisfaction seem to be associated and possibly mutually reinforcing.

Table 6: Pearson's correlation between contract satisfaction and weighing losses

	Experience of at least one weighing loss
If you had the chance to go back in time, would you sign the contract again?	-0.0265
After this contract ends, would you sign up for another one if the contract terms remained unchanged?	-0.1616*

Note: *marks the significance on a 5% level.

Perceived opportunism due to lack of transparency can also increase the farmer's perceived risk, if he/she feels vulnerable and unprotected towards the company's contract breech (Dedehouanou et al., 2013; Glover, 1987). Further, the experience of weighing losses can lead to lower expectations of revenues. Rational farmers will take this into account when making decisions about their production investments, and potentially lower their input use

(Saenger et al., 2014). Thus, contract farming can introduce additional risks to the farmer, rather than solving the market risks and uncertainties.

The importance of transparency in contract farming was also illustrated by Saenger et al. (2014). The authors introduced an independent quality control through a randomized controlled trial (RCT) for contracted dairy producers in Vietnam. They found no opportunistic behavior of the company regarding the reported quality of the milk. Nevertheless, the option of independent milk test result verification led to a significant increase in the farmers' production investments and productivity. Hence, the perceived opportunistic behavior of the contracting company introduces an additional risk that can influence the farmers' production decisions and lower the potential benefits of the contracts.

5. Discussion

The existing literature on contract farming in developing countries largely focusses on the question whether contracting is economically beneficial for smallholders. Empirical studies confirm that smallholders mostly benefit through higher yields and incomes. Nevertheless, high dropout rates from contract schemes are observed, reasons of which have not been analyzed sufficiently. In this paper, we argue that looking at narrowly defined economic indicators may be insufficient to understand farmers' views and perceptions about the contracts they have signed. The analysis of contracting in the small farm sector should be extended to more explicitly investigate farmers' satisfaction with their contract experience.

The empirical case from the oil palm sector in Ghana presented here underlines the importance of investigation beyond purely economic indicators. We found that the economic benefits that the resource-providing contract clearly brings about are fairly unrelated do the farmers' level of satisfaction, their wish to exit, and their regret to have signed the contract in the first place. The farmers' dissatisfaction seems to be much more related to the lack of information provided by the company and the limited understanding of several of the contract details.

Our data revealed that farmers were not sufficiently informed about the contracts they signed and are mostly unaware of the amount of debt they have with the company. Under the contract, farm inputs and services are easy to obtain for farmers. However, without fully understanding the debt implications this easy access raises the risk of farmers' indebtedness and default. Lack of knowledge about the level of debt and about the contractually agreed

prices and repayment schedules leads to a feeling of unfair treatment among farmers, whenever the average price paid by the company is below the spot-market price or when payment is made for quantities that are smaller than what was actually supplied. Lack of transparency increases farmers' uncertainty and causes mistrust. Many farmers believe that the company behaves opportunistically, and this feeling is correlated with the farmers' wish to exit the scheme. However, in this long-term scheme, farmers cannot exit the contract during a 20-25 year period. Farmers' inability to exit also means that the company does not have an immediate incentive to improve the communication and increase the level of transparency. On the other hand, if the company wants to expand its business and contract new farmers, satisfaction among the already contracted farmers could help, because positive and negative perceptions can spread rapidly through farmer-to-farmer exchange.

We should stress that we have no indication of true opportunistic behavior by the company. Moreover, it is important to highlight again that the farmers have actually benefited substantially from the contract in terms of higher incomes. These gains are not always so obvious for farmers. Most of them are much better off today than they were several years ago before the contract scheme had started, but farmers certainly cannot know how their situation would have developed had they not signed the contract. In this case, farmers' satisfaction with the contracts seems to be influenced more by perceptions than by actual benefits. In other words, farmers' perceptions matter and need to be accounted for by the contracting company when the wish is to develop mutually beneficial and lasting business relationships.

A review of the existing literature on contract farming provides signals that situations of limited contract transparency and mistrust are actually quite commonplace, even though issues of farmers' dissatisfaction with contracts and the underlying reasons have rarely been analyzed. Future research and policymaking should consider issues of contract transparency, farmers' satisfaction, and reasons for dropouts more explicitly, as mistrust is never a good basis for successful partnerships and for the development of smallholder-inclusive agricultural supply chains more generally.

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