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Changes induced by certification practices in the cocoa value chain

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Introduction

This paper explores how certification has changed the cocoa value chain in recent years. The concept of certification is rather simple: one organization draws a set of standards to be met by others -generally producers and suppliers; the standards are then audited/inspected by a 3rd party entity (so as to guarantee independency). Normally there is an additional entity, the accreditation body, which verifies that the 3rd party entity is properly performing its task. This is referred to as the tripartite standard regime and it has been embraced not only by retailers and industry but also by governments, world trade organizations and therefore, it has become de facto mandatory in many economic sectors (Hatanaka et al., 2011)

Companies use certification schemes as a visible proof of their corporate social responsibility (CSR); the better image of the brand may support sales and bring net profits to their business (Auld et al., 2008).

For cocoa, the most active schemes are UTZ Certified, Rainforest Alliance and Fair Trade, all of which have considerably increased the number of certified farmers and the amounts of certified product over the last few years. These schemes have something in common: they lay out process certification standards¹, they require farmers to aggregate (into groups or cooperatives) and they are marketed through labels. The proper implementation of these schemes at the producer's level is being facilitated by projects launched and executed by a broad range of organizations such as NGOs, industry and governments (Weiligmann et al., 2010).

Certified products are mostly visible through labels. Labels are therefore, the way of communicating to the end consumer about the added-value of a certain product. The added value given to the product cannot be tested for by the end-consumer since it only refers to the production process of the product and not to a quality parameter of the product. This means that certification is signaling a credence attribute on a product.

Literature available about certification schemes points in many directions, e.g. Jaffe and Henson (2004) argue that standards are a barrier for trade, while other cases (Maertens and Swinnen, 2009) show that there are pro-poor benefits within value chains using standards, others have inconclusive results (Blackman and Rivera, 2011); although there is no consensus regarding certification it is evident that the introduction in any value chain triggers changes.

In this paper we set a theoretical framework, which enables a better understanding of the situation in the cocoa value chain relating to certification and which fuels the discussion about the future of certification in commodity value chains.

¹ Process certification means that the production process is being certified. This is not to be confused with product certification, where the products are certified against a set of specified quality- requirements.

Theoretical framework

Regular cocoa can be marketed through primary and secondary traders, typically in a pyramid type of structure. As the good is (taken to be) homogeneous, traders compete at all levels, and farmers (ideally) can choose whom to sell to. In this situation, prices reflect the world market conditions, and the costs made by the (most efficient) trader.

With certification an additional quality dimension is being introduced namely, a credence attribute. A farmer can qualify only if the quality can be shown, which (in the case of process certification) requires auditing of the production process. Auditing can be done by the buyer, or by a third party, and both entail costs. ‘Auditing’ by the supplier is not credible. The cost for achieving certification (internal quality system, extra staff, audits, etc.) and thus the higher quality of the product are remunerated in form of a price premium. This premium should cover the cost of running the system and be an incentive to engage with certification in the first place. Thus costs are not in direct proportion to the quantity supplied, and economies of scale apply. This limits the possibilities for small farmers to go for this channel as a single supplier.

Scale can be obtained by organizing farmers. A group of farmers can be audited more efficiently on account of a) fixed travel cost of auditor, b) less than full auditing by random checking, c) an internal quality control system.

This grouping of farmers eliminates the role of the primary trader in the regular channel. This makes certified channels shorter.

If groups of farmers can credibly show compliance, and get certified – they become certificate holders, they can choose any (certified) trader to sell to and if enough competitors are around, an efficient price premium will be paid for the certified cocoa. In case groups are managed efficiently, the additional price premium received can lead, for example, to the creation of services for group members and thus create extra incentives to join the group, which will achieve higher scale levels. Additional benefits of implementing the certification practices, such as higher yields due to better pruning, or longer tree lives are benefits that accrue to the producers directly.

If however, a primary trader organizes the farmers into groups, it can be the trader who is the certificate holder and a new situation arises. The producers will see benefit in supplying to this trader, rather than supplying regular cocoa to other traders, as long as the premium covers their extra efforts. The trader can take advantage of this in two ways.

One way is to lower the premium offered to the producers to just this minimum incentive that is required, thus withholding part of the premium that an exporter pays the trader.

The other way is to further differentiate the certified product into high and low qualities based on additional sensory quality parameters of the cocoa beans and provide the premium only for that part of the certified crop that meets the high parameters. Presumably, the trader can get a better price from the exporter for better quality cocoa (unlike the producers); therefore, it is in the trader’s interest to use the ‘certification premium’ as an incentive for quality improvement over and above the requirements of the certification scheme. To the extent that supply of quality responds to the incentive, the trader makes an additional gain as a sole buyer of this quality. The trader can do so with certified cocoa and not with regular cocoa, because of the distinction between payments for cocoa as such and the payment of the premium.

Finally, it might be the case that an exporter groups various traders (indirectly all their suppliers) and that the exporter becomes the certificate holder. This situation suggests either that the traders or the farmer groups are not capable of providing credible compliance against the certification requirements or that a grouping at those smaller scales is not cost-effective. In this case the exporter can take advantage of the traders and farmers in a similar way as the traders exploit their position over the farmers as mentioned above. Considering the limited number of exporters in the cocoa sector and their international presence, an exporter in this situation is able – for example – to dictate the type of quality being demanded in a region or reducing the premium to a point where the returns just meet the cost of implementation for farmers and traders.

Which situation arises depends on many factors, however the trend is always the same: the introduction of certification leads to a shortening of the chain and to a concentration of product in lesser organizations. Additionally, a product differentiation is being introduced that allows for extra profits at the levels of the chain where these are being remunerated.

The following sections illustrate the above with some empirical data gathered last year.

Material and Methods

This study is based on data collected and observations made in two different cocoa regions, while using a mixed-methods approach. The first data collection took place in May 2013 in the south of the Sulawesi Barat province, Indonesia. The second data collection was between August and September 2013 in the southern part of the Haut-Sassandra department (Issia region), Ivory Coast. Data gathered is used to support the theoretical framework proposed.

Results and Discussion

In general we see a range of certification ‘projects’ which share the same characteristics/attributes: centralization of farmers into producer groups (PGs); provision of services for farmers of the PG (mainly training on GAP² for farmers, access to inputs and/or access to credit); documentation of the production process (traceability) and short-time delivery contracts (3 years) between the ‘project implementer’ and the PG. The latter suggests that production of certified cocoa is shifting from market based to contract based relations among the value chain actors. From all issues defined in the contracts, the price premium seems to be ‘fixed’ at a range between 150-200 USD per metric ton at the exporter level regardless of the country. The premium has not shown any major change since the introduction of certification.

The fact that there is a fixed premium for certified cocoa has as a consequence that the real market price for certified cocoa is no longer equal to the marginal cost of production. The variable cost for complying achieving and maintaining certification depends on the ‘certification project’ (supporters/sponsors, size of project, country, etc.). The implementation cost and the premium are completely decoupled from each other; therefore, only cost-efficient actors are (will be) able to profit from certification³ once external support (subsidies) are removed.

In line with previous research (Ruf et al., 2013) we also find out that the premium is the main incentive to engage with certification, it is important to see how the premium is being used or divided among the actors. Tables 1 and 2 show the premium breakdown in the regions visited. In Côte d’Ivoire, where most of the PGs are trader led the premium division is among 3 actors. Although this type of arrangement was most frequently found, there are a few PG in Côte d’Ivoire that do not have a trader behind the certification efforts; in those cases, the PG receives the exporters fraction of the premium, but have to bare all the costs and risk by themselves and have no secured market (buyer) for the certified product. In Sulawesi the arrangements are exporter led through the grouping of various PGs into one certificate (multi-group certification). With this type of arrangement, the premium division is between two actors, the exporter and the farmer (Table 2). Regardless of the types of arrangement in place, village

Côte d'Ivoire		
	CFA/Kg	USD/Kg
Exporter	20	0,0412
PG	30	0,0618
Farmer	50	0,1030
Total	100	0,2060

Table 1. Premium breakdown in Côte d'Ivoire

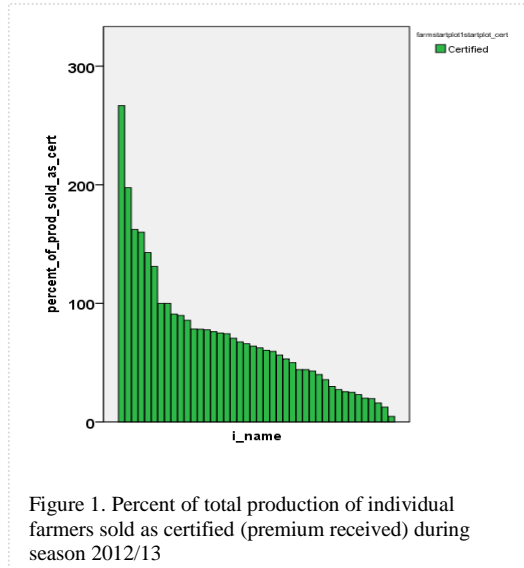
Indonesia (Polewali)		
	IDR/Kg	USD/Kg
Exporter	570-800	0,049-0,069
Farmer	500-700	0,043-0,061
Total	1070-1500	0,093-0,131

Table 2. Premium breakdown in Indonesia

² Good Agricultural Practices (GAPs) in these projects are mainly proper pruning techniques, integrated pest management (proper type and quantities of plant protection products applied), fertilizer use, soil conservation measures and reforestation measures for shade provision.

traders are being excluded from the chain, causing a shortening of the chain.

Finally, it is important to highlight that the exporters and traders only pay the certification premium at the farm level for products that complies with (extrinsic) quality parameters. In other words, premiums are paid to the farmers for high quality instead for the process behind a given product. Figure 1 illustrates this phenomenon in the case of certified farmers in Côte d'Ivoire. Here we see the percentage of cocoa produced by individual farmers that was sold as certified during the 2013/14 season. The first 6 individuals sold more certified product (received premium



per Kg) as they produced in that year, which can be explained by either receiving more premium per Kg (unequal premium repartition within the PG), or because they sold external (non-certified) cocoa as certified. Only 2 farmers received the premium for their total production. All other farmers were only able to sell fractions of their production as certified.

Conclusions and Outlook

The introduction of certification into the cocoa value chain has added intrinsic quality attributes to the product. The value chain providing the product is changing. We see a modification on the market structure at the primary level, namely a shortening of the cocoa value chain. A shift from spot market to contract-based markets is accompanying this change.

The price premium linked with certified products is the main incentive to engage with certification; however there are different ways of dividing this premium. Clarity about the mechanism setting the premium levels and how it is being divided among the actors in the chain is still missing and should be addressed with future studies. This will give more transparency within the sector, which is currently missing -especially at the exporter and trader levels.

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