

The Impact of Partnership Forms on the Improvement of Coffee Farmers' Welfare

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Abstract

This study examines the optimal partnership structure for impacting the well-being of coffee farmers. It is crucial to elucidate the variances in each business model within the context of collaborations involving coffee farmers, traders, and exporters along the coffee supply chain, and their subsequent effect on the welfare of coffee farmers within each specific partnership configuration. We employed a questionnaire to assess the influence of partnership models on the well-being of farmers. The survey was carried out in Central Aceh, known for Arabica coffee production, and Lampung, recognized for Robusta coffee cultivation. we find that farmers participating in globally certified partnership constellations score better on economic performance than farmers in local partnership constellations (both certified and conventional).

Keywords: Partnership Forms, Welfare, Coffee Certification, Farmers

Introduction

Partnering with coffee farmers is a strategic move that not only supports the local agricultural community but also ensures the production of high-quality, ethically sourced coffee (Wijaya, et al., 2017). According to Utting (2007), establishing a partnership involves collaboration with individual farmers or cooperatives, fostering relationships built on fair trade principles, sustainability, and community development. Coffee farmers engaged in certified partnerships adhere to stringent standards that encompass fair labor practices, environmental sustainability, and product quality. These certifications provide farmers with market recognition, access to premium prices, and assurance for consumers seeking ethically and sustainably sourced coffee. In contrast, non-certified partnerships lack formal recognition but may still involve collaborative efforts with a focus on ethical and sustainable practices, relying on transparent communication to convey their commitment to consumers. By engaging in such partnerships, businesses can contribute to the empowerment of Indonesian coffee farmers, promoting economic stability and social well-being within the local farming communities. Additionally, these partnerships often lead to the cultivation of unique and distinct coffee varieties, providing consumers with a diverse range of flavors while reinforcing the importance of ethical and sustainable practices in the global coffee industry.

According to Ruben & Zuniga (2011), there are two types of partnership in coffee industry namely certified and non-certified partnership. Coffee farmers engaged in certified partnerships adhere to stringent standards that encompass fair labor practices, environmental sustainability, and product quality. These certifications provide farmers with market recognition, access to premium prices, and assurance for consumers seeking ethically and sustainably sourced coffee. In contrast, non-certified partnerships lack formal recognition but may still involve collaborative efforts with a focus on ethical and sustainable practices, relying on transparent communication to convey their commitment to consumers.

Certified partnerships with coffee farmers in Indonesia play a crucial role in promoting sustainable and ethical practices within the coffee industry. Indonesia is one of the world's leading coffee producers, and certified partnerships help ensure that farmers adhere to high standards of environmental conservation, fair labor practices, and quality production. These certifications, often granted by organizations like Fair Trade or Rainforest Alliance, empower coffee farmers by providing them with fair prices for their produce, fostering community development, and promoting environmentally friendly cultivation methods. By participating in certified partnerships, Indonesian coffee farmers not only gain access to international markets but also contribute to the global movement for socially responsible and sustainable coffee production.

These partnerships often involve rigorous inspections and audits to verify compliance with the established standards. Certification programs focus on aspects such as environmentally friendly farming practices, proper treatment of workers, and the traceability of the coffee supply chain. By meeting these criteria, coffee farmers in Indonesia showcase their commitment to ethical and sustainable practices, ultimately enhancing the reputation of Indonesian coffee in the global market. Certified partnerships thus create a win-win situation, benefiting both the farmers and consumers who seek responsibly sourced and high-quality coffee. The proliferation of coffee certification in Indonesia is a direct response to the heightened demand for certified coffee from foreign buyers. There are at least seven distinct types of coffee certification embraced by Indonesian coffee producers, including UTZ, Fair Trade, 4C, Rainforest Alliance, Organic USDA, Café Practices, and Bird Friendly (ecolabel index, 2017), each entailing distinct focal points and prerequisites (Ingram et al., 2016; Vorley, 2008). Broadly speaking, coffee certification confers economic, social, and environmental advantages upon its producers (CIDIN, 2014; Blackmore et al., 2012). The discernible premium in the price of certified coffee over non-certified varieties incentivizes farmers to shift towards the production of certified coffee (Astuti et al., 2015; Ibnu et al., 2016). Moreover, consumers exhibit a preference for certified coffee, attributing it as a superior health option, despite its elevated price point (Astuti, 2018; Vlameninck & Vranken, 2015; Lee et al., 2012; Vorley & Fox, 2004).

Furthermore, the magnitude of coffee producers' economic benefits hinges on the coffee's marketing channels (Astuti et al., 2015). It is imperative, therefore, to scrutinize the forms of partnership in determining the well-being of coffee farmers, with partnership referring to the collaborative endeavors among stakeholders within the coffee supply chain. This study analyzes how these partnership forms influence coffee farmers' well-being. Hence, it is paramount to explicate the variances in each business model within the framework of partnerships among farmers, traders, and coffee exporters in the coffee supply chain and the resultant well-being of coffee farmers in each form of partnership.

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Besides, Coffee partnerships can have a significant impact on several Sustainable Development Goals (SDGs), contributing to broader global efforts for sustainable and equitable development. One notable area of impact is SDG 1 (No Poverty), as fair trade practices within coffee partnerships often lead to increased income for farmers, addressing poverty at the grassroots level. Additionally, SDG 8 (Decent Work and Economic Growth) is positively influenced, as these partnerships prioritize fair labor practices, supporting sustainable employment and economic development in coffee-producing regions.

SDG 12 (Responsible Consumption and Production) is addressed through certified partnerships that promote environmentally friendly and sustainable farming practices, reducing the ecological footprint of coffee production. Furthermore, SDG 15 (Life on Land) benefits from partnerships that prioritize biodiversity conservation and sustainable land management, promoting the health of ecosystems in coffee-growing regions. Overall, coffee partnerships can serve as effective tools in achieving multiple SDGs by fostering economic growth, social well-being, and environmental sustainability within the coffee industry.

Several studies indicate differences in business models within certification schemes (see Potts et al., 2014; Beuchelt et al., M. 2013; Vorley et al., 2008), where the business model creates value for its products (Potts et al., 2014; Vorley et al., 2008). How the business model generates environmental, economic, and social benefits for actors in the coffee supply chain, such as different business models resulting in disparities in environmental protection, worker rights, efficiency, costs, and income (Potts et al., 2014; Kuit et al., 2013; Vermeulen & Cotula, 2010). The coffee certification is a business model connecting farmers to the market through sustainability standards (Jena et al., 2012; Stellmacher, Grote, 2011). Therefore, different types of certification will offer different benefits to adopters, whether economic, social, or environmental (Breukers, 2015; Dragusanu et al., 2013; Paschall, 2013). For instance, Fairtrade strongly emphasizes trade, improving access to agricultural production infrastructure, and enhancing the welfare of farmers (Paschall, 2013). Meanwhile, Rainforest Alliance focuses on environmental conservation, and Organic Certified concentrates on environmental improvement through the reduced use of chemical fertilizers (Dragusanu et al., 2013; Paschall, 2013). The differing focus of each coffee certification provides distinct benefits for actors in the coffee supply chain, in terms of premium prices and other social and environmental advantages.

Partnerships are crucial in coffee development as they facilitate collaboration between various stakeholders, including farmers, businesses, and certification organizations, fostering sustainable and ethical practices in the industry (Wijaya, et al., 2017). Through these collaborations, knowledge-sharing, resource pooling, and collective efforts are enabled, positively impacting the economic, social, and environmental aspects of coffee production and trade. However, the differences in business models within coffee certification become irrelevant in the case of Indonesia since the holders of coffee certification are coffee exporters (not the farmers). Another factor is that coffee exporters typically hold more than one type of coffee certification to meet buyer demands. Therefore, this study will not analyze the variations in benefits derived from different types of coffee certification. Instead, it will observe the disparities in business models manifested through partnerships associated with the well-being of coffee farmers. The forms of partnership implemented by exporters with their affiliated groups of coffee farmers will differ from one exporter to another. For example, one exporter

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may provide technical guidance through field schools to coffee farmers, while another may not offer such facilities. The magnitude of the premium fee provided to coffee farmers also varies from one exporter to another. Additionally, the extent of social responsibility differs among exporters. Hence, this study posits that differences in partnership models will yield disparities in the well-being of coffee farmers.

Methods

This study uses a questionnaire to measure the impact of partnership models on farmers' wellbeing. The fieldwork was conducted in Central Aceh (Arabica coffee producer) and Lampung (Robusta coffee producer). The survey encompassed six partnership models in Central Aceh (3) and Lampung (3). Each region had three types of partnerships: global certification, local certification, and conventional (non-certification). These partnership models were observed across a total of eight exporters in the respective regions, as indicated in the table below.

Partnership Forms	Arabica (Central Aceh)		Robusta (West Lampung)			
	Exporter and location	Number of farmers	Exporter and location	Number of farmers		
Global Certification	Exporter A Takengon	40	Exporter B Way Tenong	40		
Local Certification	Exporter C Benermeriah	40	Exporter D Ranau	40		
Local Conventional	Exporter E Takengon	40	Exporter G Way Tenong	40		
	Exporter F Benermeriah	40	Exporter H Ranau	40		

Tabel 1. Partnership Forms in Central Aceh and West Lampung

In addition, farmer welfare is defined operationally as follows: coffee area (CIDIN, 2014; Beuchelt et al., 2011; Verkaart, 2008), total coffee production (Beuchelt et al., 2011), productivity in kg/ hectare (CIDIN, 2014; Verkaart, 2008), the number of coffee trees (CIDIN, 2014; Verkaart, 2008), coffee prices per kilo (CIDIN, 2014; Verkaart, 2008; Bacon, 2005),

coffee revenues (Beuchelt et al., 2011), production cost (Beuchelt et al., 2011), and profit (Beuchelt et al., 2011). Farmer welfare can also be measured through efficiency (costs, profits, and lead times) and equity (marketing- and profit margins) (Nzima et al., 2014; Shumeta et al., 2012).

Hence, in this scholarly work, we undertake the operationalization and deconstruction of the concept of economic performance. This involves a comprehensive examination of various metrics, including the aggregate area of coffee cultivation (measured in hectares), the total annual yield of coffee production (measured in kilograms per year), productivity (quantified in kilograms per hectare), the total count of coffee trees, unit prices of coffee per kilogram, the total value of coffee production, and lead times (the duration in days between the harvesting of coffee beans and their delivery to exporters). Higher numbers indicate better economic performance for all variables except lead times.

Result and Discussion

This study indicates that not all aspects of farmer welfare are statistically significant, such as the absence of differences in coffee area and number of plants. Nevertheless, the study successfully demonstrates significant disparities in welfare across each partnership model, such as in coffee production, productivity, prices, revenues, and lead times. Farmers affiliated with the globally certified partnership constellations experience superior welfare compared to the other two partnership models (locally certified partnership constellations and conventional partnership constellations). Additionally, there are notable differences in coffee prices between the certified partnership constellations (global and local) and the conventional partnership constellations. However, discrepancies between partnership models in Robusta and Arabica coffee varieties could not be discerned, as illustrated in the table below.

Variable	Robusta	Arabica			
Coffee Area (hectare)	No significant difference	No significant difference			
Total coffee production (kg/ year)	GCPC, LCPC, and LCOPC	GCPC, LCPC, and LCOPC			
Productivity (kg / per hectare)	GCPC, LCPC, and LCOPC	GCPC, LCPC, and LCOPC			
Coffee trees (trees)	No significant difference	No significant difference			
Coffee prices (Rp/kg)	GCPC and LCPC LCOPC	GCPC and LCPC LCOPC			
Coffee Revenue (Rp)	GCPC, LCPC, and LCOPC	GCPC, LCPC, and LCOPC			
Lead times (days)	GCPC, LCPC LCOPC	GCPC, LCPC, LCOPC			

Table 2.	Results
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** Global Certification Partnership Constellation (GCPC), Local Certification partnership Constellation (LCPC), Local Conventional Partnership Constellation (LCOPC)

The table above illustrates the trends wherein farmers engaged in globally certified partnership constellations exhibit superior economic performance compared to their counterparts participating in locally certified and conventional partnerships. This contrast in performance can be elucidated by factors encompassing adherence to plantation management protocols, the frequency of training sessions, the standardization of pricing mechanisms, and the level of engagement by various stakeholders within certified and conventional value chains. According to plantation management guidelines, it is noteworthy that most Indonesian coffee plantations share a similar scale, and most farmers adhere to standardized cultivation directives that prescribe optimal methods and locations for planting coffee trees. This uniformity in practice may account for the limited variation observed among farmers in different partnership constellations regarding their coffee cultivation area and the number of trees they possess.

According to the respondents in our interviews, the relatively high total coffee production and productivity from farmers in globally certified partnership constellations can be explained by regular and reoccurring services and training in good agricultural practices the farmers in these constellations receive. The regularity of these interventions emerges as a crucial factor, facilitating the assimilation of training content into the farmers' daily routines. The interviews brought to light that the training programs offered within local certified partnership constellations were perceived as inadequately infrequent to effectively drive change. With regards to service provision, respondents predominantly highlighted the relatively straightforward accessibility of credit facilities as a primary factor accounting for the heightened economic performance of farmers engaged in global certified partnership constellations.

As the price for certified coffee has been internationally standardized, it is no surprise that we could not find differences in coffee prices between farmers participating in global- and local certified partnership constellations. Based on earlier research (Sri Astuti et al., 2015) we may further conclude that the quality of certified coffee beans is generally better than conventional coffee beans, explaining the relatively lower prices for conventional coffee. However, because farmers in local certified partnership constellations have significantly lower production and productivity than their global certified counterparts, we do not see that the higher prices for certified coffee necessarily pay off in higher revenues for farmers in local certified partnership constellations. Their revenue is significantly lower than for farmers in globally certified partnership constellations and local conventional constellations. Increasing production and productivity, which seems prerogative to farmers in globally certified partnership constellations, appears to be crucial to explain differences in revenues between the farmers in global partnership constellations and farmers in local partnership constellations. Finally, we see that farmers participating in certified partnership constellations (both global and local) have shorter lead times than farmers in conventional constellations. This can be explained by the larger number of actors involved in conventional value chains (i.e., with the inclusion of middlemen) and the enhanced organizational skills of the certified actors.

We conclude that regular training and easy access to services such as credits seem more important in explaining differences in economic performance than certification itself. The provision of training is enabled through the availability of knowledgeable staff members and financial resources. Given the institutional set-up, the availability of partners, and the presence of funds for training, globally certified partnership constellations seem to be best suited to provide farmers with training and service. Improvements in production and productivity are further important to explain differences in revenues.

Based on these results, we can conclude that differences in averages are substantial for most variables underlying economic performance. The partnership constellation the farmer participates in substantially affects the farmers' economic performance. If we compare these results to earlier research on the effects of certification on economic performance, stating that certification leads to significant differences in economic performance, although the differences are rather small (see Astuti et al., 2015), we can conclude that partnership constellations seem to play a more substantial role in leading to variation in economic performance than certification alone.

Table 2 furthermore shows that the mean differences resulting from participation in different partnership constellations, as discussed above, do not necessarily imply that partnership constellations are the single most important reason behind explaining these differences. We can, however, say that partnership constellations explain most variation in lead times (i.e., 94%). Also, the variation in coffee prices can relatively well be explained by farmers' membership in different partnership constellations (58% for Robusta and 69% for Arabica), followed by the variation in production (30% and 44% respectively), productivity (42% and 32%), and revenues (34% and 50%). This implies that other factors play a role in explaining differences in economic performance. More research is needed to reveal these factors, but the respondents in our study suggested further considering the effects of government policies, weather variation, fluctuations in market supply and demand, variation in costs for inputs (e.g. working capital), farmers' entrepreneurial skills, and the use of technological innovation.

Dependent Variable of	Constant		Partnership Constellation		F	Sig	R
Robusta Coffee	Coefficient	Sig.	Coefficien t	Sig.	1	Sig.	K
		**0.0					
Coffee Area	1.58	0	0.092	0.361	0.84	0.361b	0.084a
		**0.0		**0.00		**0.001	
Total Coffee Production	2627	0	484	1	11.97	b	0.303a
		**0.0		**0.00		**0.000	
Productivity	1940	0	344	0	24.64	b	0.416a
		**0.0					
Coffee Trees	2995	0	206	0.307	1.05	0.307b	0.097a
		**0.0		**0.00		**0.000	
Coffee Prices	22450	0	1018	0	58.47	b	0.576a
		**0.0		**0.00		**0.000	
Coffee Revenues	58227917	0	11897875	0	15.84	b	0.344a
		**0.0		**0.00		**0.000	
Lead Times	4	0	9	0	889.06	b	0.940a
	Constant		Partnership		F	Sig.	
Dependent Variable of			Constellation				R
Arabica Coffee	Coefficient	Sig.	Coefficien t	Sig.		~18.	
		**0.0					
Coffee Area	1.41	0	0.081	0.318	1.00	0.318b	0.092a
		**0.0		**0.00		**0.000	
Total Coffee Production	1221	0	219	0	28.89	b	0.444a
		**0.0		**0.00		**0.000	
Productivity	1017	0	143	0	13.08	b	0.316a
		**0.0					
Coffee Trees	2174	0	250	0.091	2.91	0.091b	0.165a
		**0.0		**0.00		**0.000	
Coffee Prices	58850	0	3000	0	107.78	b	0.691a
		**0.0		**0.00		**0.000	
Coffee Revenues	69714725	0	13935200	0	38.80	b	0.497a
					1		1
		**0.0		**0.00		**0.000	

Table 3. Partnership Constellations Influence Economic Performance

**Significant p <0.05

Given the counterfactual relation between certification and partnership constellations, we cannot further distinguish between the independent effects of certification and partnership constellations; certification is not fully independent of partnership constellations. However, based on previous research, we can conclude that only looking at certification as an underlying reason for differences in economic performance seems too short-sighted. The isolated effects of certification seem to be positive but extremely small at best (also see Astuti et al., 2015). Partnership constellations and the institutionalized differences among them (translating in differences in the provision of trainings and support) seem to play a more important role in explaining differences in economic performance than certification alone.

According to Wijaya, et al. (2017), established collaborations with coffee farmers in Indonesia, marked by certifications, are integral for advancing sustainability and ethical standards in the coffee sector. As one of the top global coffee producers, Indonesia benefits from these certified partnerships, which play a key role in ensuring that farmers maintain elevated standards in

environmental conservation, fair labor practices, and the production of high-quality coffee. These certifications, commonly issued by organizations like Fair Trade or Rainforest Alliance, empower coffee farmers by ensuring fair compensation for their yields, encouraging community development, and endorsing environmentally conscious cultivation methods.

Conclusion

This study contributes to the literature on sustainability standards and the impacts of these standards on the economic performance of Indonesian coffee smallholders. Instead of measuring the direct impact of certification on economic performance, we analyze its impact through the potentially mediating factor of partnership constellations. We compare the economic performance of three groups of coffee smallholders participating in three different partnership constellations: global certified constellations, local certified constellations, and local conventional constellations. Generally, we find that farmers participating in globally certified partnership constellations (both certified and conventional). For coffee prices and lead times, we also identify a better performance of the farmers in local certified partnership constellations compared to farmers in local conventional constellations.

The availability of enough financial resources and manpower to provide regular trainings and services seems to be crucial in explaining the relatively good economic performance of farmers in global certified partnership constellations. Regular training seems to enable farmers to internalize new information and skills into their daily practices. Subsequently, these farmers produce significantly higher productivity, leading to higher revenues. Given their financial situation, it is much harder for local exporters to offer similar trainings in terms of intensity and content. Of course, there may be different ways, beyond certification and beyond exporters, to organize regular trainings for farmers. For example, via public extension services that may be able and suited to provide (training) services. However, this would ask for a priority shift within the Indonesian public extension system from a strong focus on food crops, particularly paddy and rice, towards a more balanced focus on cash crops, such as coffee. Global partnership constellations also score better on economic performance because they provide farmers with better access to credit facilities and external funds. These facilities include loans in cash and kind (e.g., fertilizers, farming equipment, coffee seedlings, and shade-tree nurseries). By expanding their credit, farmers seem to be able to intensify their coffee production and productivity. This reinforces the earlier described effects on productivity resulting from the internalization of Good Agricultural Practices. Currently, global exporters and banks develop special financing schemes for farmers, as most farmers are individually unable to provide guarantees to banks, which is a requirement to receive credit. The financing schemes are structured as group-based credits wherein banks finance individuals through farmer groups to reduce non-payment risk. Global exporters subsequently ensure that farmers use these credits to intensify coffee production, allowing the farmers to make more profit and repay the loans. Here again, we see that the mechanism through which improved economic performance can be explained and achieved is not prerogative to certification. This reinforces our conclusion that certification alone is not enough to explain variation in economic performance and that certification as a stand-alone strategy is only responsible for a small part of farmers' enhanced economic performance.

Further, we have seen that coffee certification does not necessarily result in a significantly higher economic performance for smallholders. In terms of coffee production and productivity, for example, we could not identify significant differences between local certified partnership constellations and local conventional partnership constellations. Again, training and the provision of credits seem to be more explanatory here.

This study also revealed the important role of funding; if local exporters had sufficient funding to provide services such as regular trainings, technical assistance, and credit, they may also succeed in improving the quantity and quality of coffee production and the revenues of their farmer-members.

Currently, it becomes clear that we have reasons to be critical about the intensity of the effects of certification on economic performance. However, we must acknowledge that our operationalization and approach to economic performance fit into a micro-economic perspective, where the farmers become center-stage. A different approach would consist of adopting a more macro-economic perspective towards economic performance, for example, through analyzing the effects of certification on indicators such as poverty alleviation, healthcare, and education. Some Indonesian coffee-producing areas are among the poorest regions in Indonesia. It may therefore be relevant to analyze differences in poverty levels among certified and uncertified coffee farmers in Indonesia. This suggestion will also contribute to existing impact studies in the field of certification.

References

- Astuti, E.S, Offermans, A., Glasbergen, P. (2015) Sustainability Certification and Economic Performance: An Analysis of Coffee Marketing Channels in Indonesia. Journal of economics and sustainable development 6:24: 84-98, ISSN 2222-1700 (Paper) ISSN 2222-2855 (Online)
- Beuchelt, T.D., and M. Zeller. (2011). Profits and Poverty: Certification's Troubled Link for Nicaragua's Organic and Fairtrade Coffee Producers. Ecological Economics 70 (7): 1316–1324.
- Blackmore, E., J. Keeley, R. Pyburn, E. Mangus, L. Chen, and Q. Yuhui. (2012). Pro-poor Certification: Assessing the Benefits of Sustainability Certification for Small Scale Farmers in Asia. United Kingdom: International Institute for Environment and Development.
- Breukers, B.S. (2015). Are certification systems beneficial for farmers? An 'on-the-ground' comparison of co- existing sustainability standards in the Colombian coffee sector. Master Thesis. Utrecht University
- CIDIN (Centre for International Development Studies Nijmegen). (2014). Impact of coffee certification on smallholders' welfare: Evidence from field studies in East Africa. Retrieved at July 3, 2013 from http://www.solidaridad.nl/sites/solidaridadnetwork.org/files/CIDIN%20Policy%20Brief -040214_1.pdf.
- Dragusanu, R., Giovannucci, D. and Nunn, N. (2014). The Economics of Fair Trade. Journal of Economic Perspectives, 28(3): 217-36
- Ecolabel index. (2017). Retrieved at November 7, 2017 from http://www.ecolabelindex.com/ecolabels/ Edwards, Sebastian. (2001). Capital Mobility and Economic Performance: Are Emerging Economies Different?
- Ingram, V.J, L.O. Judge, M. Luskova, S. van Berkum and J. van den Berg. (2016). Upscaling sustainability initiatives in international commodity chains. Examples from cocoa, coffee and soy value chains in the Netherlands. WOTNatuur& Milieu, Wageningen UR. Wottechnical report 67.125 p.46-52
- Jena, P. R., Chichaibelu, B. B., Stellmacher, T. and Grote, U. (2012). The impact of coffee certification on small-scale producers' livelihoods: a case study from the Jimma Zone, Ethiopia. Agricultural Economics, 43, 429-440.
- Kuit,M., Van Rijn, F., Tu, V.T.M., and Van Anh,P. (2013). The Sustainable coffee conundrum: a study into the effects, cost and benefits of implementation modalities of sustainable coffee production in Vietnam. Wageningen University. Retrieved at October 2 2017, from http://agri-logic.nl/wp-content/uploads/ 2016/03/131001_The-Sustainable-Coffee-Conundrum.pdf
- Kuit, M., Rijn, F. C., Vu, T. M. T., and Pham, V. A. (2013). The sustainable coffee conundrum: a study into the effects. Cost and Benefits of Implementation Modalities of Sustainable Coffee Production in Vietnam.Wageningen UR, Netherlands.

Lee, J., Gereffi, G., and Beauvais, J. (2012). Global value chains and agrifood standards:

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challenges and possibilities for smallholders in developing countries. Proceedings of the National Academy of Sciences, 109(31), 12326-12331.

- Nzima, M.D., Joseph D., & Bonnet K. (2014). Structure, Conduct and Performance of Groundnuts Markets in Nothern and Central Malawi: Case Studies of Mzima and Kasungu Districts. International Journal of Business and Social Science. 5(6): 130 139.[[1]]
- Paschall M, (2013). The Role of Third Party Certification in Improving Small Farmer Livelihoods. University St. Gallen, Dissertation .No. 4101. Accessed on 2.03.13, http://verdi.unisg.ch/www/edis.nsf/SysLkp ByIdentifier/4101/\$FILE/dis4101.pdf St. Gallen, Dissertation .No. 4101. Accessed on 2.03.13, http://verdi.unisg.ch/www/edis.nsf/SysLkp ByIdentifier/4101/\$FILE/dis4101.pdf St. Gallen, Dissertation .No. 4101. Accessed on 2.03.13, http://verdi.unisg.ch/www/edis.nsf/SysLkp ByIdentifier/4101/\$FILE/dis4101.pdf St. Gallen, Dissertation .No. 4101. Accessed on 2.03.13, http://www.edis.nsf/SysLkp ByIdentifier/4101/\$FILE/dis4101.pdf
- Potts, J., Matthew L., Ann W., Gabriel H., Maxine C., & Vivek V. (2014). The States of Sustainability Initiatives Review: Standards and The Green Economy. International Institute for Sustainable Development. https://www.iisd.org/pdf/2014/ssi_2014.pdf
- Paschall M, (2013). The Role of Third Party Certification in Improving Small Farmer Livelihoods. University St.
- Potts, J., Lynch, M., Wilkings, A., Huppé, G.A., Cunningham, M. &Voora, V. (2014). The State of Sustainability Initiatives Review, 2014: Standards and the Green Economy. IISD: Winnipeg. Retrieved at March 2, 2017 from http://www.iisd.org/publications/statesustainability-initiatives-review-2014-standards-and-green- economy.
- Ruben, R. and Zuniga, G. (2011), "How standards compete: comparative impact of coffee certification schemes in Northern Nicaragua", Supply Chain Management, Vol. 16 No. 2, pp. 98-109. https://doi.org/10.1108/13598541111115356
- Shumeta, Z, Kaba Urgessa, and Zerihun Kebebew. (2012). Analysis of Market Chains of Forest Coffee in Southwest Ethiopia. Academic Journal of Plant Sciences 5 (2): 28-39[SEP:Starbucks. (2013). Starbucks global responsibility report: goals and progress 2013. Retrieved at December 5, 2017 from https://globalassets.starbucks.com/assets/b48b38aed56e4fdd8dcdbbfad23e3242.pdf
- Stellmacher, T. and Ulrike Grote. (2011). Forest Coffee Certification in Ethiopia: Economic Boon or Ecological Bane. Working Papers Series 76. University Bonn
- Utting, K. Assessing the Impact of Fair Trade Coffee: Towards an Integrative Framework. J Bus Ethics 86 (Suppl 1), 127–149 (2009). https://doi.org/10.1007/s10551-008-9761-9
- Verkaart, S. (2008). "Effects of UTZ Certified and Fair Trade on Coffee Producers in Uganda and Tanzania: Certification and the People and Profit Dimensions of Corporate Social Responsibility." Master thesis, Radboud University Nijmegen.
- Vermeulen, S. and Cotula, L., (2010), Making The Most of Agricultural Investment: A Survey of Business Models that Provide Opportunities for Smallholders, IIED/FAO/IFA/SDC. London/ Rome/ Bern/ ISBN: 978-1-84369-774-9.
- Vlaeminck, P. and Vranken, L. (2015). Do labels capture consumers' actual willingness to pay for Fair Trade characteristics? Bioeconomics Working Paper Series. Working Paper 2015/5

- Vorley, B., Mark Lundy and James MacGregor. (2008). Business Models that are inclusive of small farmers. Paper prepared for FAO and UNIDO as background to the Global Agro-Industries Forum, New Delhi, 8 - 11 April 2008
- Vorley, B., and T. Fox. (2004). Global food chains Constraints and opportunities for smallholders'. Paper prepared for OECD DAC POVNET Agriculture and Pro-Poor Growth Task Team, Helsinki Workshop, 17-18 June, http://www.oecd.org/ development/ povertyreduction/36562581.pdf, last accessed on 3 October 2013.

Wijaya, A., Glasbergen, P., Mawardi, S. (2017). The mediated partnership model for sustainable coffee production: experiences from Indonesia. International Food and Agribusiness Management Review: 20 (5)- Pages: 689 – 708. https://www.wageningenacademic.com/doi/ref/10.22434/IFAMR2017.0021?role=tab



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