

Towards Sustainable Cocoa: Assessing Governance Strategies and their Theories of Change in the Cocoa Sourcing Landscape Ghana

The Role of Cooperatives and Collective Action as well as Inclusive Value Chains and Inclusive Business in achieving a Living Income for Farmers and their Families

Seminar Instructors: Christoph Oberlack and Ravaka Andriamihaja (CDE and Institute of Geography, University of Bern) in collaboration with Christian Robin and Michaela Kuhn (Swiss Platform for Sustainable Cocoa)

CDE and Institute of Geography, University of Bern

Lia Häfeli, 18-102-061

Bern, 05.02.2023

Tables of contents

1	Introduction.....	4
1.1	Problem statement.....	4
1.2	Introduction of the cocoa sourcing landscape Ghana.....	4
1.3	Towards a living income for farmers and their families	5
1.4	Intervention types.....	6
1.5	Research objective and research questions	6
2	Methodology	7
2.1	Way of proceeding.....	7
2.2	Theory of Change.....	7
2.3	Limitations	8
3	Results	9
3.1	Pathway 1: Strengthening Collective Action and Cooperatives	9
3.2	Pathway 2: Inclusive Value Chains.....	12
3.3	Pathway 3: Inclusive Business	13
3.4	Underlying conditions.....	15
4	Discussion	16
5	Conclusion	17
6	Bibliography.....	19

Executive summary

The cocoa sector faces various challenges that need to be addressed before a transformation towards sustainable development can be achieved. One key challenge is poverty which most of the smallholder farmers are confronted with every day. Even though measures against the issue of poverty have been addressed by various stakeholders, many smallholder cocoa farmers in Ghana still earn an income below the living income benchmark. Therefore, this seminar paper investigates the role of cooperatives and collective action as well as inclusive value chains and inclusive business in contributing to a living income for farmers and their families in Ghana. Main pathways to impact, underlying conditions, and unintended impacts have been identified using the methodology of Theory of Change.

The results show that by strengthening cooperatives and collective action and enhancing inclusive value chain and inclusive business progress towards achieving a living income for farmers can be made. But multiple activities need to be taken simultaneously to have an impact on the income of farmers. Cooperatives and inclusive value chain models provide various services. Through their democratically organized structures they include, to some extent, farmers into the decision-making process and give them bargaining power. Cooperatives as well as inclusive value chains rely on voluntary sustainability standards as mechanisms to pay higher prices through premiums. Relying on certifications has its limitations as farmers cannot fully profit from the certification.

Regarding this, inclusive business models are proposed as a niche innovation. If farmers or farmers' cooperatives have equity ownership, they earn some of the profits from chocolate sale. Studies show that income substantially increased, and risks are distributed along the value chain.

To conclude a holistic approach with multiple interventions is needed to tackle the poverty issues in the cocoa sector and ensuring a living income for farmers and their families with stakeholders along and beyond the value chain taking responsibility. Special attention has to be paid to unintended impacts which can arise from living income strategies.

1 Introduction

The cocoa sector faces multiple social, economic, and environmental challenges such as child labour, poverty and deforestation (A. C. Fountain & Huetz-Adams, 2020). Even though interventions and actions have been taken by different stakeholders, the sector is still far from meeting Human Rights or achieving the Sustainable Development Goals (SDGs). The farmers are most affected by asymmetric power relations in the global value chain and at the same time face most of the risks such as volatile prices on world markets or external factors such as climate change (A. C. Fountain & Huetz-Adams, 2020).

1.1 Problem statement

There is evidence that cocoa farmers have not profited much from the revenues generated in the global cocoa value chain. Most of the revenues go to other stakeholders along the chain such as manufacturers or retailers (Tsowou & Gayi, 2019). “Farmers only receive a very low share which does not permit them to enjoy a decent livelihood” (Tsowou & Gayi, 2019:16). In the cocoa sourcing landscape Ghana, an estimated amount of only 9.4% of the cocoa farmers’ households earn a living income (A. C. Fountain & Huetz-Adams, 2020). Making it 90.6% which are below the living income benchmark (A. C. Fountain & Huetz-Adams, 2020). This indicates that almost every farmer and his/her family is experiencing poverty in their daily lives. Besides poverty there are other challenges identified in Ghana. One of them being child labour even on certified farms because additional labour forces are not affordable for farmers (Ingram et al., 2018). Second large-scale deforestation has taken place in Ghana (A. C. Fountain & Huetz-Adams, 2020). In addition, the use of traditional agricultural practices leading to the degradation of soils together with low inputs and a lack of capital results in low yields (Gockowski et al., 2011 cited in Roldan et al., 2013). Finally, farmers are faced with high risks due to changing climate conditions (Ingram et al., 2018) and possible health issues (Deans et al., 2018). Antoine Fountain & Friedel Huetz-Adams (2022) argue that “farmer poverty is a driver of just about every problem in the cocoa sector” (A. Fountain & Huetz-Adams, 2022:10). Therefore, poverty can be identified as a key challenge for the cocoa sourcing landscape Ghana.

1.2 Introduction of the cocoa sourcing landscape Ghana

Ghana is after Côte d’Ivoire the second largest producer of cocoa worldwide with an amount of 689’000 tonnes in 2020/21 (A. Fountain & Huetz-Adams, 2022). However, a decline in Ghana’s production can be observed linked to three threats: outbreak of a cocoa virus, increased pressure on cocoa by goldmining and a cost-of-living-crisis (A. Fountain & Huetz-Adams, 2022). Cocoa is mainly produced by smallholder farmers (SWISSCO, 2021) with an average farms size of less than 4 ha (Roldan et al., 2013). In Ghana cocoa is highly valued as it is the main source of income for many households (Roldan et al., 2013). The main institution that governs decision making in the cocoa sector is the Ghana Cocoa Board (Cocobod). Cocobod is the marketing board by the Ghanaian government. Cocobod controls the Ghanaian part of the value chain, “setting prices and minimum standards, and licensing buying companies” (Laven, 2010 cited in Deans et al., 2018:145). The cocoa sector in Ghana is therefore dominated by the state and in contrast to other cocoa producing countries only partially liberalized (World Bank, 2013 cited in Deans et al., 2018).

Another important institution in the Ghanaian cocoa sector is the Kuapa Kokoo Cooperative Cocoa Farmers and Marketing Union (previously referred to as Kuapa Kokoo). Kuapa Kokoo has over 100'000 members all over Ghana (Kuapa Kokoo, 2023). The cooperative is organized democratically and operates at the community, district, and national level (Kuapa Kokoo, 2023). Kuapa Kokoo's "objectives are to empower small-scale cocoa producers, enhance female participation in the decision-making process through gender mainstreaming, and encourage environmentally sustainable production" (Kuapa Kokoo, 2023). Due to its size and extent Kuapa Kokoo has potential to truly influence decision making in the cocoa sector and act as a change agent.

In Ghana efforts have been made to reduce poverty and create better conditions for farmers. In 2019 Ghana (Cocobod) together with Côte d'Ivoire (Conseil du Café-Cacao) introduced the Living Income Differential (LID) an extra fee of \$400 per tonne of cocoa (A. C. Fountain & Huetz-Adams, 2020). However, the success of this LID has been limited due to conflicts during execution between the government and the industry and companies avoiding paying the LID (A. Fountain & Huetz-Adams, 2022). Furthermore, there is the private sector and non-governmental organisations that support farmers in coming closer to a living income with major strategies being productivity increase, income diversification (A. C. Fountain & Huetz-Adams, 2020) or strengthening of local capacities (Ingram et al., 2018 cited in Waarts et al., 2021). Yet, such interventions did not have the effect of generally reducing poverty amongst smallholder farmers as the impact on household income was mixed, limited or none (Waarts et al., 2021). Fountain & Huetz-Adams (2022) state that "in practice, not a single large chocolate or cocoa company is paying higher prices at farm gate level" (A. Fountain & Huetz-Adams, 2022:11). This leads to a need for a holistic approach towards a living income for farmers and their families with stakeholders along and beyond the value chain taking responsibility.

1.3 Towards a living income for farmers and their families

This seminar paper aims to make a progress towards a living income for farmers and their families in the cocoa sector in Ghana. As poverty can be seen as the underlying challenge to overcome the other challenges facing the cocoa sector, "towards a living income for farmers and their families" has been chosen as a target area for this seminar paper.

Living income is defined as "the net annual income required for a household in a particular place to afford a decent standard of living for all members of that household. Elements of a decent standard of living include: food, water, housing, education, healthcare, transport, clothing, and other essential needs including provision for unexpected events" (Living Income, 2023). The income of a household is composed of produce consumed at home, secondary crop income, primary cash crop income and net off-farm income from other activities as well as other sources of income such as remittances (Living Income, 2023). The income gap is referred to as the difference between the living income benchmark and the actual income (Living Income, 2023).

This gap needs to be closed following a holistic approach. Determining factors to be considered are crop price, diversification of income, improvement of framework conditions and local governance (SWISSCO, 2021). By achieving a living income for farmers and their families the following SDGs will be addressed: SDG 1 no poverty and SDG2 zero hunger (SWISSCO, 2021).

1.4 Intervention types

The target area is supported by focussing on two interventions: strengthening cooperatives and collective action among producers and enhance inclusive value chains and inclusive business. Collective action strategies generate various organisational structures, in which they create and capture value within a network of stakeholders (Oberlack et al., 2020). To realise common values and interests, actions are taken jointly (Ostrom, 1990 cited in Oberlack et al., 2020). One type of collective action are cooperatives. Cooperatives value “democratic decision-making, equality, and solidarity” (ICA, 2020 cited in Candemir et al., 2021:119). “Members are the owners, investors and users of the cooperative” (Candemir et al., 2021:119). Regarding living income, cooperatives play an important role in helping smallholder farmers reach access to global markets (Donovan et al., 2017).

The focus on inclusive value chains and inclusive business points out that all stakeholders within the value chain are responsible for achieving a living income for farmers and their families with the goal to create real social benefits even beyond the chain. Inclusive value chains and inclusive business aim at including farmers as producers, entrepreneurs to use the value created to satisfy local needs (Ros-Tonen et al., 2019). It must be noted that often inclusive value chains and inclusive business are driven by economic incentives for companies to secure future supply (Ros-Tonen et al., 2019).

1.5 Research objective and research questions

This seminar paper contributes to the roadmap 2030 of Swissco for tackling challenges in the cocoa sector. The goal is to investigate the role of cooperatives and collective action and inclusive value chain and inclusive business on progress towards a living income for farmers and their families. The aim of this paper is to identify pathways to impact as well as unintended impacts and conditions of the selected interventions for achieving a living income by conducting a Theory of Change based on empirical research data. Furthermore, the strengths and limitations for living income strategies in Ghana and the cocoa sector are investigated. Finally, the aim is to draw implications for practice, policy and research in how to achieve a living income for farmers and their families by strengthening cooperatives and collective action and inclusive value chains.

The following research questions are addressed in the seminar paper:

- What are the key challenges and prospects for sustainable development in Ghana? What are the main institutions (law, policy, agencies) that govern decision-making regarding land use and sustainable development in Ghana?
- How do cooperatives and collective action as well as inclusive value chains and inclusive business contribute to achieving a living income for famers and their families in Ghana? What are the main pathways to impact?
- What are their strengths and limitations to drive the transformation towards sustainability in Ghana and the cocoa sector more broadly? What are key implications for practice, policy and research?

2 Methodology

2.1 Way of proceeding

The way of proceeding is divided into three steps. First a content analysis is conducted to identify on the one hand the key challenges and prospects for sustainable development in Ghana and on the other hand the institutions that govern decision-making regarding land use and sustainable development. This is done by a review of scientific and grey literature. Second, pathways to impact, conditions and unintended impacts have been assessed using the Theory of Change (ToC) methodology based on a review of nine published primary studies. The results have been complemented and verified by means of an expert interview. The expert interview was conducted with Manuela Stiffler from Fairtrade Max Havelaar. Third, key implications are derived from the results and critically discussed.

2.2 Theory of Change

The ToC enables analysis of change processes. A ToC is a model that explains how and why an activity is expected to lead to a transformation (B. Belcher & Claus, 2020). This methodology is used to describe complex socio-economic systems with the underlying assumption “that causal processes are often non-linear with multiple interactions” (B. Belcher & Claus, 2020). Furthermore, the ToC encourages to critically analyse the different pathways and can help identify interventions needed to reach the intended impact (B. Belcher & Claus, 2020).

Nine published empirical primary studies served as a data source for the ToC conducted in this seminar paper. Some of them are chosen from the list of proposed starting literature provided by the seminar instructors. In addition, Google Scholar, Scopus and Swisscovery served as sources for the other studies. In the choice of primary studies, care was taken to ensure that the studies were of different types, e.g. case studies, comparative studies, meta-analyses. Other criteria for deciding on a primary study were that an empirical study either covered topics of sustainable cocoa, living income, inclusive value chain/business, cooperatives, or collective action. In case there was limited amount of literature available on an intervention, attention has been paid that the study either was conducted in sub-Saharan Africa or in the context of cocoa. The following table lists the case studies used as data source in this paper.

Table 1: Selected primary studies for depicting the ToC

1	Deans, H., Ros-Tonen, M. A. F., & Derkyi, M. (2018). Advanced Value Chain Collaboration in Ghana's Cocoa Sector: An Entry Point for Integrated Landscape Approaches? <i>Environmental Management</i> , 62(1), 143–156. https://doi.org/10.1007/s00267-017-0863-y
2	Ingram, V., van Rijn, F., Waarts, Y., & Gilhuis, H. (2018). The impacts of cocoa sustainability initiatives in West Africa. <i>Sustainability (Switzerland)</i> , 10(11), 1–20. https://doi.org/10.3390/su10114249
3	Donovan, J., Blare, T., & Poole, N. (2017). Stuck in a rut: emerging cocoa cooperatives in Peru and the factors that influence their performance. <i>International Journal of Agricultural Sustainability</i> , 15(2), 169–184. https://doi.org/10.1080/14735903.2017.1286831
4	Amponsah, D., Awunyo-Vitor, D., Wongnaa, C. A., Prah, S., Sunday, O. A., & Acheampong, P. P. (2023). The impact of women groundnut farmers' participation in Village Savings and Loans Association (VSLA) in Northern Ghana. <i>Journal of Agriculture and Food Research</i> , 11(September 2022), 100481. https://doi.org/10.1016/j.jafr.2022.100481

5	Ollivier de Leth, D., & Ros-Tonen, M. A. F. (2022). Creating Shared Value Through an Inclusive Development Lens: A Case Study of a CSV Strategy in Ghana's Cocoa Sector. <i>Journal of Business Ethics</i> , 178(2), 339–354. https://doi.org/10.1007/s10551-021-04808-1
6	Waarts, Y. R., Janssen, V., Aryeetey, R., Onduru, D., Heriyanto, D., Aprillya, S. T., ... Ingram, V. J. (2021). Multiple pathways towards achieving a living income for different types of smallholder tree-crop commodity farmers. <i>Food Security</i> , 13(6), 1467–1496. https://doi.org/10.1007/s12571-021-01220-5
7	Candemir, A., Duvaleix, S., & Latruffe, L. (2021). Agricultural Cooperatives and Farm Sustainability – a Literature Review. <i>Journal of Economic Surveys</i> , 35(4), 1118–1144. https://doi.org/10.1111/joes.12417
8	Gallo, P. J., Antolin-Lopez, R., & Montiel, I. (2018). Associative Sustainable Business Models: Cases in the bean-to-bar chocolate industry. <i>Journal of Cleaner Production</i> , 174, 905–916. https://doi.org/10.1016/j.jclepro.2017.11.021
9	Oberlack, C., Bich Thao, D., Zambrino, L. A., Blare, T., Quoc Can, T., & Xuan Viet, V. (2020). Building inclusive food chains: Pathways beyond land inequality through collective action, (December), 1–29. Retrieved from https://doi.org/10.48350/152355

For the empirical results of each primary study a ToC was depicted. Like the depiction of (B. M. Belcher et al., 2020) a distinction is made into a sphere of control, a sphere of influence and a sphere of interest. Finally, a synthesized ToC was developed across all primary studies to identify similarities and differences in interventions and pathways to impact.

The ToCs were depicted following the seven steps recommended by (B. Belcher & Claus, 2020): (1) define overall purpose, (2) identify main activities, (3) identify the outputs intended to result from the activities, (4) identify outcomes that will result from the planned activity (5) identify impacts that will be influenced by the outcomes, (6) analyse the conditions about the main causal relationships, and (7) revise and refine the ToC. Attention was paid to represent all important elements in the ToC and at the same time not to be over-complex. Moreover, specific causal links were added to depict a nuanced relationship among elements as suggested by Dhillon & Vaca (2018).

2.3 Limitations

Using the ToC methodology for the analysis of complex or wicked problems such as achieving a living income comes with the risk of depicting the pathways to impact either in a too simplistic or too complicated way. Therefore, one has to find the appropriate level of complexity. Whilst keeping in mind that a ToC is never capable of depicting the whole reality.

Especially the case studies which serve as a data source, all take place in a particular context. This context might be different for other cases, thus leading to different impacts. By identifying the underlying conditions, this limitation is being counteracted. It is therefore important to be aware of these conditions when deciding whether an impact could be true for another context or not. In addition, the selection of the ten primary studies is subjective. As the selection might be influenced by the author's assumption of what is going to happen.

3 Results

The following chapter describes the synthesized ToC derived from the nine primary studies introduced in the previous chapter. A particular focus was placed on the role of cooperatives and collective as well as inclusive value chains and inclusive business in achieving a living income for farmers and their families in the cocoa sector. The results show that those two interventions are of significance but contribute not solely to a living income at farmgate level. Figure 1 synthesizes the main pathways to impact (activity, output, outcome, impact) to a living income including expected positive impacts and unintended impacts as well as underlying conditions.

3.1 Pathway 1: Strengthening Collective Action and Cooperatives

Collective action strategies are a way to reach common goals especially for actors with little bargaining power. One organizational form of collective action are cooperatives. In the cocoa sector cooperatives play a non-neglectable role as they are means to address various type of challenges. Candemir et al. (2021) observe that in general cooperatives have positive impact on the economic, environmental, and social dimension.

Cooperatives' role in the cocoa value chain

Cooperatives take on the role as a buffer between international stakeholders and the local small-holder farmers in coping with market imperfections (Candemir et al., 2021). Cooperatives take responsibility for different steps in the value chain: completes post-harvesting processing (e.g. fermenting, drying, sorting), manages the trade of cocoa, coordinate payments and product promotion (Oberlack et al., 2020).

Cooperatives are an opportunity for farmers, who often lack bargaining power, to get access to global markets (Candemir et al., 2021). Candemir et al. (2021) finds that the possibility to export “can encourage farmers to engage in quality improvement via product differentiation” (Candemir et al., 2021:1125). Thus, leading to higher prices provided by the cooperative (Candemir et al., 2021).

Role of voluntary sustainability standards for collective action

To ensure the quality of their products, cooperatives often choose to adopt voluntary sustainability standards (e.g. certification) (Candemir et al., 2021). Through training, farmers are made familiar with the standards (Ingram et al., 2018). This leads to knowledge about Good Agricultural Practices (GAP) and knowledge about conditions of child labour (Ingram et al., 2018). This leads to the adaption of safer and environmentally friendlier practices resulting in positive effects on human health respectively on the environment (improved soil and water quality) (Ingram et al., 2018). The implementation of GAP is “bigger for farmers receiving the most complete packages of services” (Ingram et al., 2018:8). GAP lead to an increase in productivity which is thus influence by external factors such as weather conditions (Ingram et al., 2018). This then translates in positive impacts of these practices on income (Ingram et al., 2018).

Impact of cooperatives' activities

The literature review by Candemir et al. (2021) shows that for farmers organized in cooperatives an increase in productivity or income can be observed as well. The impacts of cooperative membership have a greater effect on farmers with a smaller farm size (Candemir et al., 2021). This finding is related to the lack of bargaining power of smallholder farmers (Candemir et al., 2021).

An important function of cooperatives is to provide technical assistance in implementing innovative activities such as GAP. This positively influences the outcome, adoption of GAP by farmers (Candemir et al., 2021). Provision of technical assistance leads to an improvement in productivity and profits, a reduction in cost of production and allows the farmers to reach quality standards (Candemir et al., 2021). Increasing productivity by innovative activities bares the risk of adverse impacts on the environment (Candemir et al., 2021).

Farmers have different incentives for joining a cooperative. Donovan et al. (2017) observes access to production inputs being one of the most mentioned factors by farmers. Also Candemir et al. (2021) observed that “non-price factors provide higher incentives to stay in a cooperative than prices” (Candemir et al., 2021:1126). Which indicates the farmers' dependence on provision of services and inputs.

Empowerment of women in cooperatives

There is great potential for cooperatives engaging in empowering women. Women being a member of the cooperative profit from higher prices, but no effect was observed on market power (Candemir et al., 2021). However, non-monetary benefits of women membership in cooperatives have been observed. These refer to “increased negotiation skills and ability to take decisions” (Ferguson & Kepe, 2011 cited in Candemir et al., 2021:1127).

Amponsah et al., (2023) suggests Village Savings and Loans Associations (VSLA) as an alternative for women empowerment. VSLA are managed by the members collectively to provides them with a “safe avenue for their savings, access to credit and a source of emergency support” (Amponsah et al., 2023:2). This is done by accumulating savings collectively, generating credits to the members need and ability to repay (Amponsah et al., 2023). VSLA are an alternative way for marginalized farmers to get access to credit. Participation in a VSLA has shown positive effects for farm productivity and thus income (Amponsah et al., 2023).

Provision of infrastructure

In addition, cooperatives contribute to public infrastructure such as roads and schools (Candemir et al., 2021). Similar findings have been observed by Donovan et al. (2017) where cooperatives provided in addition to public infrastructure, equipment and tools as well. A cooperative in Peru “constructed seven collection centres supplied by the smaller, neighbouring communities to dry and ferment cocoa” (Donovan et al., 2017:175). With the decentralization of post-harvesting processes transportation costs have been lowered and high-quality of the beans is ensured (Donovan et al., 2017). The local government supported this activity by donating the land required for construction (Donovan et al., 2017).

Cooperatives' dependence on external fundings

Findings from Donovan et al. (2017) indicate that cooperatives are dependent on external fundings. Cooperatives can therefore be strengthened by the provision of external fundings for example by the national government, NGOs, or private investors. In return, if no fundings are available the cooperative cannot meet the demand of their members in providing services or technical assistance (Donovan et al., 2017).

Challenges faced by cooperatives

Cooperatives are faced with different challenges especially in meeting the expectation of their members. Evidence from cooperatives in Peru shows that if cooperatives are unable to purchase their members' cocoa, side-selling outside of the cooperative increases (Donovan et al., 2017). Another challenge faced by cooperatives is to maintain strong relationships with buyers and other stakeholders (Donovan et al., 2017). Noncompliance with contracts leads to low trust and furthermore, negatively influences the performance of the cooperative (Donovan et al., 2017).

3.2 Pathway 2: Inclusive Value Chains

Inclusive value chains are suggested as a second pathway to address the issue of a living income for farmers and their families as well as related challenges such as unequal power amongst stakeholders, volatile cocoa prices, lack of capital to invest, etc. (Oberlack et al., 2020). Different actors along the chain are collaborating voluntarily to achieve sustainability along and beyond the chain (Deans et al., 2018).

Role of voluntary standards for inclusive value chains

One important aspect of an inclusive value chain is that they often are combined with promoting voluntary sustainability standards in form of certification (Deans et al., 2018; Oberlack et al., 2020). Therefore, an additional price premium can be achieved on the world market, a share of which is passed to farmers as a bonus (Deans et al., 2018). Premiums paid for voluntary sustainability standards are also invested in target-oriented premium funds by cooperatives (Oberlack et al., 2020). The adoption of voluntary sustainability standards "gives rise to a need for greater support and monitoring of farmers' activities, leading to greater interaction with farmers and increasing their integration into the value chain" (Deans et al., 2018:148).

Collaboration between farmers and stakeholders further in the value chain

Collaboration with farmers by stakeholders further in the value chain is therefore the second important aspect of inclusiveness. Therefore, regular meetings with farmers are held to provide training to receive advice on agricultural practices, health and safety guidance and discuss challenges in adopting the sustainability standards (Deans et al., 2018). These are held by local NGOs (Oberlack et al., 2020) or regional commercial officers of the company supported by "lead farmers" acting as role model because of their "exemplary farming practices and strong community connections" (Deans et al., 2018:148). Incentives (food, inputs) are given to farmers for participating in the meetings (Deans et al., 2018), suggesting they would not prioritize these meetings otherwise. The meetings foster farmer-to-farmer communication, also with farmers from outside

the particular value chain collaboration (Deans et al., 2018). This increases the possibility of spill-over effects and exchange of social capital. With the training farmers knowledge on GAP “including pruning, the spacing of trees, cocoa nurseries, non-toxic fertilizers and the correct application of these fertilizers” (Deans et al., 2018:151) increase and they are sensitized about the long-term impact for sustainability of their practices (Deans et al., 2018). Yield increase has been observed as an outcome of adoption of GAP within a season (Deans et al., 2018). Compared to farmers in conventional value chains higher prices have been reported for farmers in inclusive value chains (Deans et al., 2018). Other than the meetings farmers are not given the opportunity to meet with other stakeholders further in the value chain (Deans et al., 2018). On-site visits by the chocolate producing company are another form of collaborating and supporting the farmers (Oberlack et al., 2020).

Women in leadership positions to ensure equitability

Inclusive value chains also have to ensure equitability. Different measures are taken to support the women’s role in value chains. This can be encouraging women to take leadership positions within the organizational structures (Oberlack et al., 2020).

Environmental issues addressed by inclusive value chains

In inclusive value chains not only social or economic issues are addressed but also environmental issues. For example, farmers are operating in biodiverse agroforestry systems (Oberlack et al., 2020). Companies are investing in forest protection project (Oberlack et al., 2020). In the case of Original Beans, the company offers farmers living near nature conservation areas an income from cocoa. From the agroforestry system they can earn income from selling timber and thus a reduction in illegal timber harvesting has been observed (Oberlack et al., 2020). Farmers sometimes report difficulties in “establishing stable and biodiverse agroforests on land with soils that had been heavily exposed to chemicals due to the previous coca monoculture” (Oberlack et al., 2020:32).

3.3 Pathway 3: Inclusive Business

Private companies often face trade-offs between their own corporate objectives such as profitability and the expectations of society of having societal impacts (Ollivier de Leth & Ros-Tonen, 2022). Even though this trade-off must be taken seriously and can lead to limited positive impacts, the strategy of Creating Shared Value (CSV) is presented here as an opportunity for companies to take responsibility and “create value for shareholders as well as for people in the countries in which [they] operates” (Ollivier de Leth & Ros-Tonen, 2022:343).

Shared value

In comparison to strengthening cooperatives, in activities of inclusive business models are usually funded by private investments by the company (Ollivier de Leth & Ros-Tonen, 2022). There are different activities carried out as part of the CSV strategy. First, a premium is paid for certified cocoa. A share of which is paid to the farmers and farmers groups, the bigger part is spent on administrative cost and other stakeholders in the value chain (Ollivier de Leth & Ros-Tonen, 2022). Farmers express the concern that they only receive the premium for cocoa which they sell

in high season (Ollivier de Leth & Ros-Tonen, 2022). This finding matches with the experiences made by Fairtrade. Only 30-40% of certified cocoa is actually sold as Fairtrade (Stiffler, 2023). Thus, leading to the fact that farmers cannot profit to the full extent from certification. Reasons are the over-supply of certified cocoa in combination with too little demand (Stiffler, 2023).

Second, trainings for farmers are organized providing them with knowledge (Ollivier de Leth & Ros-Tonen, 2022). This leads to applying of GAP. But higher yields are not reported in every case because of climate change and a lack of capital (Ollivier de Leth & Ros-Tonen, 2022).

Third, the company is equipping farmers with inputs including high-yielding disease resistant coco tree seedlings, pesticides and fertilizers, tools and protective clothing (Ollivier de Leth & Ros-Tonen, 2022). The application of fertilizers thus increases productivity but has adverse effect on farmers health and biodiversity (Ollivier de Leth & Ros-Tonen, 2022). An unintended impact of this productivity increase was simultaneous increase in deforestation rates (Ollivier de Leth & Ros-Tonen, 2022). This finding implies that activities aiming to increase living income have to be followed by activities addressing further sustainability issues.

Further activities carried out by the CSV strategy is the support of cooperatives and farmer groups (Ollivier de Leth & Ros-Tonen, 2022). To some extend farmers are incorporated into the decision-making process by giving them the possibility to decide on community plans and activities implemented through them (Ollivier de Leth & Ros-Tonen, 2022). Infrastructure such as health and sanitary facilities have been installed in some community which increased health for those living in the communities (Ollivier de Leth & Ros-Tonen, 2022). Last but not least, a Child Labour Monitoring and Remediation System (CLMRS) has been implemented to combat child labour (Ollivier de Leth & Ros-Tonen, 2022). Which had positive outcomes on children's education and health and their well-being (Ollivier de Leth & Ros-Tonen, 2022).

Potential of equity ownership

A niche innovation for inclusive business is the case of a community-based and farmer-owned chocolate company promoted by Choba Choba where farmers own a share of 30% of the company using their revenues (Oberlack et al., 2020). "As shareholders of the stock company, producers are represented on the board, which allows them to participate in decision-making, including cocoa pricing, product development, and communication." (Oberlack et al., 2020:31). Bottom-up pricing and representation of farmers at the board has led to a minimum price paid twice the market price (Oberlack et al., 2020). "The minimum price guarantee, together with profit sharing from chocolate sales and technical assistance, results in greater benefits and risk sharing for farmers" (Oberlack et al., 2020:32). As a result, the income of smallholders participating in this kind of inclusive value chain has highly increased (Oberlack et al., 2020). Although Choba Choba relied on capital provided by the Swiss government in the establishment phase (Oberlack et al., 2020). Another slightly less inclusive business model is the one of Divine Chocolate which also makes use of the equity ownership approach (Gallo et al., 2018). The company combines the voluntary sustainability standards of Fairtrade with an equity ownership structure "allowing for a greater distribution of the firm's wealth" (Gallo et al., 2018:910). The majority share is owned by the cooperative Kuapa Kokoo (Gallo et al., 2018). Members of the cooperative hold two seat at

the board which allows them to take part in the decision-making process and provides them with additional bargaining power as well as beneficial market knowledge (Gallo et al., 2018). Because of equity ownership Divine Chocolate was able to provide the farmers with the premium form Fairtrade and the sales of the higher value chocolate bars (Gallo et al., 2018). Fundings provided by the firms profits allowed the cooperative to make “considerable investments and partnerships with NGOs to address issues ranging from women's rights, education, land conservation, and economic development” (Gallo et al., 2018:912).

The impacts of collective action and inclusiveness in business models is according to Gallo et al. (2018) influenced by the ownership structure. Companies with no cocoa farmers ownership “tackled environmental and social challenges in so far as the market would reward these behaviors” (Gallo et al., 2018:912). In contrast the companies with equity ownership tackled these issues, “regardless of the market's willingness to pay for these initiatives” (Gallo et al., 2018:912). This means that equity ownership can overcome the trade-off faced by companies.

3.4 Underlying conditions

The above-mentioned pathways to impact only generate the expected impact if certain underlying conditions are fulfilled. The following conditions have been mentioned in the primary studies to ensure an effective and inclusive collaboration.

Strong organizational structures which at the same time build on the principles of democracy, equality and solidarity are crucial to ensure that collectively organized systems work. Candemir et al. (2021) the quality of the outcome is affected when cooperatives are dealing with organizational problems. Donovan et al. (2017) made similar observations as cooperatives with well-established internal governance performed better in meeting the needs of their members and provide them with services.

Furthermore, trust and reliability are probably the most important conditions for functioning partnerships whether in cooperatives or inclusive value chains. Trust is the basis of all kinds of relationships between humans. The important role of trust has been observed in almost all primary studies (cf. Donovan et al., 2017; Oberlack et al., 2020). Trust has been an important factor for farmers participation in cooperatives, purchasing contracts of cooperatives with companies or for getting access to credits.

Ensuring inclusiveness is key for raising a high number of farmers out of poverty. Mostly only farmers taking part in a programme profit from the positive outcomes. Special attention must be paid on including women, youth and marginalized groups. Although, in some cases spill-over effects have been observed (Ingram et al., 2018).

All the above-mentioned pathways to impact depend on voluntary agreements and are dependent on external funding. This indicates that positive outcomes / impacts can only be achieved if there is willingness by the different stakeholders to address the challenges.

At last, the enabling environment is of great significance. While trust, inclusiveness, involvement in decision-making process are preconditions, “also essential for success are an institutional enabling environment and policy support” (Oberlack et al., 2020:43). There must be an environment

which secures rights, ownership, and the voice of people. To achieve expected impact, the interventions need to be accepted by the government and supported by policies.

4 Discussion

The results show that multiple interventions are needed to address the sustainability challenges in the cocoa sector. Collective action as well as inclusive value chains and inclusive business play a significant role in not only making progress towards a living income but also having the potential of tackling further sustainability issues. So far equity ownership is a niche innovation but has shown that it significantly increases farmers income. But the question remains to which extent this intervention would be scalable. This chapter discusses the most important implications for the cocoa sourcing landscape Ghana and their strengths and limitations to drive transformation towards sustainability.

In all selected intervention types (cooperatives and collective action, inclusive value chain and inclusive business) voluntary sustainability standards are adopted to on the one hand ensure quality of the product and on the other hand tackle sustainability challenges. Certification also legitimizes the higher price which consumers encounter. Thus, leading to a premium where a share of it is passed to the farmers or cooperatives. Fairtrade goes one step further in as they pay not only a premium but a Living Income Differential premium (Stiffler, 2023). Since in Ghana Cocobod is defining the price, companies cannot just pay higher prices for cocoa. This must happen in form of a premium, providing of funds, etc. As the case of Fairtrade shows paying a Living Income Differential is possible even when the farm gate price is regulated by the state. A limitation is the fact, that there is an oversupply of certification which means that not all farmers can fully benefit from higher prices, even though they have higher production costs to achieve the standards. This issue can be addressed through raising awareness amongst costumers and companies about the sustainability challenges the cocoa sector faces. Research plays a role in bringing the knowledge to the population.

Interventions and resulting activities supporting the target of a living income do not automatically lead to the adoption of sustainable practices. Increasing productivity has led to agricultural intensification resulting in deforestation. This example shows that if certain measures are not taken this does not necessarily lead to the improvement of overall sustainability, especially environmental sustainability. Cooperatives may have preconditions to ensure inclusiveness as they build on the principles of democracy, equity, and solidarity. It is important that policy makers, leaders of the cooperatives, companies and researchers are aware respectively investigate on unintended impacts and trade-offs.

Including smallholder famers into global value chains “implies significant risks and can create new dependencies” (Ros-Tonen et al., 2019 cited in Oberlack et al., 2020:14). How wealth and profit is distributed amongst smallholder farmers related the other stakeholders needs careful investigation. A really important factor is traceability and transparency. Further research could investigate how these unequal distribution and new risks faced by farmers could be addressed.

However inclusive value chains have the potential to provide more bargaining power to smallholder farmers. By including them into the decision-making process it is ensured that their needs are addressed.

Moreover, an interesting case presented by the results is equity ownership. The examples of Divine Chocolate and Choba Choba indicate that implementation of such interventions is possible. Studies have shown that the income has substantially increased. In addition, inclusiveness of smallholder farmers and power in the decision-making process has increased through representation on the board. Is there a potential to upscale this potential to achieve a transformation? Stiffler (2023) is in the opinion that other well-established intervention such as the ones by Fairtrade already are too big. However, one possibility to address this challenge could be, to combine already established initiatives with niche innovations.

Finally, all interventions presented above are voluntary. Since in Ghana Cocobod is one of the most powerful stakeholders in the cocoa sector this could present a major lever to address the sustainability challenges faced by the cocoa sector. By lobbying Cocobod could provide an enabling environment. Also, it is connected on the global market which could be an opportunity to inform the companies about the challenges faced by smallholder farmers on local level and to what extent certain interventions are feasible.

5 Conclusion

Smallholder farmers in the cocoa sector and in the cocoa sourcing landscape of Ghana face various environmental, social, and economic challenges. One of the key challenges amongst cocoa farmers and their families in Ghana is poverty. Poverty could be seen as an underlying challenge of all other sustainability issues in the cocoa sector.

Ghana is the second biggest exporter of cocoa worldwide. Because of that cocoa is an important produce and responsible for the income many smallholder farmers. The cocoa sector in Ghana is only partially liberalized and controlled by Cocobod. Cocobod is in charge of setting the prices and minimum standards which makes it to one of the most important actors governing decision-making regarding land use and sustainability in the cocoa sector in Ghana. Cooperatives also play an important role in the cocoa sector as they empower smallholder farmers and integrate them in the decision-making process of the cooperative. Kuapa Kokoo is a very large cooperative operating on local, regional, and national level in the cocoa sector in Ghana.

Even though measures have been taken to tackle the issue of poverty in the cocoa sector in Ghana by Cocobod, companies and cooperatives, still a very high number of farmers are below the living income benchmark. Therefore, this seminar paper investigates the role of cooperatives and collective action as well as inclusive value chains and inclusive business in contributing to a living income for farmers and their families in Ghana. Main pathways to impact, underlying conditions, and unintended impacts have been identified using the methodology of ToC.

The results show that by strengthening cooperatives and collective action and enhancing inclusive value chain and inclusive business progress towards achieving a living income for farmers can be made. But multiple activities need to be taken simultaneously to have an impact on the income of

farmers. Cooperatives and inclusive value chain models provide various services such as farmers training, infrastructure, technical assistance, and access to production inputs. Through their democratically organized structures they include, to some extent, farmers into the decision-making process and give them bargaining power. In inclusive value chains feedback loops may be integrated where farmer can express their concerns by taking part in meetings or on-site-visits by the company. Cooperatives as well as inclusive value chains rely on voluntary sustainability standards as mechanisms to pay higher prices through premiums. Relying on certifications only has its limitations as only a little share of the certified cocoa can actually be sold as such due to a lack of demand. Therefore, farmers and farmers organisation can not fully profit from the certification.

Regarding this, inclusive business models are proposed as a niche innovation. If farmers or farmers' cooperatives have equity ownership, they earn some of the profits from chocolate sale. Studies show that income substantially increased, and risks are distributed along the value chain. Attention has to be paid on new risks and dependencies arising through this model. However, this model provides farmers with more bargaining power and access to decision-making.

To conclude a holistic approach with multiple interventions is needed to tackle the poverty issues in the cocoa sector and ensuring a living income for farmers and their families with stakeholders along and beyond the value chain taking responsibility. There exist a lot of best-case practices which should be considered and potentially scaled up to transform the cocoa sector towards more sustainability.

6 Bibliography

- Amponsah, D., Awunyo-Vitor, D., Wongnaa, C. A., Prah, S., Sunday, O. A., & Acheampong, P. (2023). The impact of women groundnut farmers' participation in Village Savings and Loans Association (VSLA) in Northern Ghana. *Journal of Agriculture and Food Research*, 11(September 2022), 100481. <https://doi.org/10.1016/j.jafr.2022.100481>
- Belcher, B., & Claus, R. (2020). *Theory of change*. Akademie Der Naturwissenschaften. https://naturwissenschaften.ch/co-producing-knowledge-explained/methods/td-net_tool-box/theory_of_change
- Belcher, B. M., Davel, R., & Claus, R. (2020). A refined method for theory-based evaluation of the societal impacts of research. *MethodsX*, 7, 100788. <https://doi.org/10.1016/j.mex.2020.100788>
- Candemir, A., Duvaléix, S., & Latruffe, L. (2021). Agricultural Cooperatives and Farm Sustainability – a Literature Review. *Journal of Economic Surveys*, 35(4), 1118–1144. <https://doi.org/10.1111/joes.12417>
- Deans, H., Ros-Tonen, M. A. F., & Derkyi, M. (2018). Advanced Value Chain Collaboration in Ghana's Cocoa Sector: An Entry Point for Integrated Landscape Approaches? *Environmental Management*, 62(1), 143–156. <https://doi.org/10.1007/s00267-017-0863-y>
- Dhillon, L., & Vaca, S. (2018). Refining Theories of Change. *Journal of MultiDisciplinary Evaluation*, 14(30), 64–87. https://journals.sfu.ca/jmde/index.php/jmde_1/article/view/496/444%0Ahttp://journals.sfu.ca/jmde/index.php/jmde_1/article/view/496
- Donovan, J., Blare, T., & Poole, N. (2017). Stuck in a rut: emerging cocoa cooperatives in Peru and the factors that influence their performance. *International Journal of Agricultural Sustainability*, 15(2), 169–184. <https://doi.org/10.1080/14735903.2017.1286831>
- Fountain, A. C., & Huetz-Adams, F. (2020). *2020 Cocoa Barometer*. www.cocoabarometer.org
- Fountain, A., & Huetz-Adams, F. (2022). *2022 Cocoa Barometer*.
- Gallo, P. J., Antolin-Lopez, R., & Montiel, I. (2018). Associative Sustainable Business Models: Cases in the bean-to-bar chocolate industry. *Journal of Cleaner Production*, 174, 905–916. <https://doi.org/10.1016/j.jclepro.2017.11.021>
- Ingram, V., van Rijn, F., Waarts, Y., & Gilhuis, H. (2018). The impacts of cocoa sustainability initiatives in West Africa. *Sustainability (Switzerland)*, 10(11), 1–20. <https://doi.org/10.3390/su10114249>
- Kuapa Kokoo. (2023). *Kuapa Kokoo*. <https://kuapakokoo.com/>
- Living Income. (2023). *Living Income Community of Practice*. <https://www.living-income.com/>
- Oberlack, C., Bich Thao, D., Zambrino, L. A., Blare, T., Quoc Can, T., & Xuan Viet, V. (2020). *Building inclusive food chains: Pathways beyond land inequality through collective action*. December, 1–29. <https://doi.org/10.48350/152355>

- Ollivier de Leth, D., & Ros-Tonen, M. A. F. (2022). Creating Shared Value Through an Inclusive Development Lens: A Case Study of a CSV Strategy in Ghana's Cocoa Sector. *Journal of Business Ethics*, 178(2), 339–354. <https://doi.org/10.1007/s10551-021-04808-1>
- Roldan, M. B., Fromm, I., & Aidoo, R. (2013). From Producers to Export Markets: The Case of the Cocoa Value Chain in Ghana. *Journal of African Development*, 15(2), 121–138.
- Ros-Tonen, M. A., Bitzer, V., Laven, A., Ollivier de Leth, D., van Leynseele, Y., & Vos, A. (2019). Conceptualizing inclusiveness of smallholder value chain integration. *Current Opinion in Environmental Sustainability*, 41, 10–17. <https://doi.org/10.1016/j.cosust.2019.08.006>
- Stiffler, M. (2023). *Expert Interview with Manuela Stiffler from Fairtrade Max Havelaar*.
- SWISSCO. (2021). *SWISSCO Roadmap 2030 “Tackling Challenges Together”*.
- Tsowou, K., & Gayi, S. K. (2019). Trade Reforms and Integration of Cocoa Farmers into World Markets: Evidence from African and non-African Countries. *Journal of African Trade*, 6(1–2), 16–29. <https://doi.org/10.2991/jat.k.190916.001>
- Waarts, Y. R., Janssen, V., Aryeetey, R., Onduru, D., Heriyanto, D., Aprillya, S. T., N'Guessan, A., Courbois, L., Bakker, D., & Ingram, V. J. (2021). Multiple pathways towards achieving a living income for different types of smallholder tree-crop commodity farmers. *Food Security*, 13(6), 1467–1496. <https://doi.org/10.1007/s12571-021-01220-5>