

Closing the living income gap: a case-study analysis of initiatives in the Ghanaian cocoa sector

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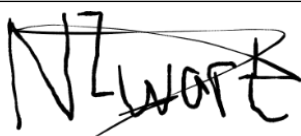
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iii. Abstract

Ghana is the second-largest cocoa-producing country worldwide. Most Ghanaian cocoa farmers are smallholders that do not earn a living income. This is needed to ensure a proper livelihood for the farmers as well as to have a sustainable sector. No conclusive path to make sure these farmers reach a living income is established yet although there are many initiatives aiming to. This research contributed to the discussion by using a qualitative approach. Thirteen interviews were conducted with twelve different initiatives. The interviews were transcribed and coded according to the proposed interventions discussed in literature. Opportunities and challenges were established following the eight sector activities taken from the integrated food systems framework of Borman et al. (2022). The research led to the creation of four recommendations for practitioners in the Ghanaian cocoa sector. First, **proper, large-scale research** is needed as there is still a lot of debate around the effectiveness of interventions and the right path to close the living income gap. Second, the sector should develop platforms to participate more in **knowledge sharing**. Third, the **empowerment of farmers** should become a priority to ensure they are included in the decision-making process. Fourth, the sector needs to invest more in **collaboration**.

Key words: living income challenge, living income gap, smallholder cocoa farmers, Ghana, interventions, initiatives

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Abbreviations

Cocobod	Ghana Cocoa Board
CODAPEC	Cocoa Pest and Disease Control
CSO	Civil Society
EU	European Union
FAO	Food and Agriculture Organisation
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
GLSS	Ghana Statistical Service
ISSER	Institute of Statistical Social and Economic Research
LICoP	Living Income Community of Practice
LID	Living Income Differential
NGO	Non Governmental Organisation
SDG	Sustainable Development Goal
VSLA	Village Savings and Loans Association
VSS	Voluntary Sustainability Standards

Chapter 1: Introduction to the Ghanaian cocoa sector

1.1 Background

Ghana is the second-largest cocoa-producing country worldwide after Côte d'Ivoire (Ghana Statistical Service (GLSS), 2019). Around 20% of total cocoa production originates there (Anang et al., 2011). Cocoa is the main crop produced and exported in Ghana (Anang et al., 2011; Hainmueller et al., 2011) and has the highest total export value (GLSS, 2019; Institute of Statistical Social and Economic Research (ISSER), 2021). Around 30% of the Ghanaian population depends on the production of cocoa (Kongor et al., 2018). Therefore, the sector has a major influence on both the economic and social state of the country (Hainmueller et al., 2011).

According to Bymolt et al. (2018), 90% of the agricultural households in Ghana produce cocoa. Of those households, 96% used it as a cash crop, meaning it is sold rather than consumed in their household. Of the cocoa-producing households, 79% indicated cocoa to be their most important crop since it is perceived to provide the largest income (Bymolt et al., 2018). The Food and Agriculture Organisation (FAO) (2018) also argued cocoa can generate the highest income for farmers in Ghana. The cocoa sector is contested because of its relation to poverty, child labour, and health and environmental problems (Hainmueller et al., 2011; Matissek et al., 2012).

The commodity market of cocoa depends on smallholder farmers, as 90% of production worldwide comes from smallholders (Bymolt et al., 2018). Most of them own less than 2 ha of land (Wessel & Quist-Wessel, 2015). In Ghana, 70 to 100% of the total household income of smallholders comes from cocoa production (Anang et al., 2011). Smallholders are especially vulnerable as they have limited market power as price-takers (Macek et al., 2018).

A multitude of problems arises related to poverty in the cocoa sector. They can mainly be seen as social or economic. However, the cocoa sector is also considered to be related to environmental problems (Hainmueller et al., 2011). A good example is deforestation, which often happens to increase total land and with that production rather than enhancing agricultural practices to increase yields on the same amount of land (Hainmueller et al., 2011; Kolavalli & Vigneri, 2017). The implementation of good agricultural practices is needed to ensure the quality of the beans (Anang et al., 2011), as well as to ensure production in the future (Macek et al., 2018).

Difficulties arise with determining the exact number of cocoa farmers in Ghana that live in poverty. Research by Asamoah et al. (2013) indicated that 17.8% of households depending on cocoa had an income lower than poverty line based on the national minimum wage in 2010. However, 40% of these farmers had an annual spending lower than this minimum wage. One clear definition for income and poverty is lacking. Furthermore, troubles occur when determining for example gross versus net

income, determination of the poverty line, and what sources of income to include (van Vliet et al., 2021). The extreme poverty line of the World Bank was taken as poverty benchmark by van Vliet et al. (2021). They estimated that 30-58% of Ghanaian cocoa farmers earn less than this line. A range was provided, as the used data originates from three different sources that present different results. Furthermore, data collection is a challenge. Bymolt et al. (2018) argued that opposing claims of other research, the number of cocoa farmers that live in poverty is not larger for cocoa-producing households than in other sectors of the country, and is even lower. However, this does not mean that these smallholder farmers are having a decent income. Scientific agreement seems to be present of the fact that most cocoa farmers in Ghana are still struggling to make ends meet (Asamoah et al., 2013; Bymolt et al., 2018; Kiewisch & Waarts, 2020; van Vliet et al., 2021).

Following the Brundtland definition, it is important to consider the three pillars of sustainable development; social, economic and environmental (Brundtland, 1987), to reach a sustainable cocoa sector. Van Berkum et al. (2018) also highlighted the importance of this triple bottom approach in obtaining sustainable food systems as well as the Sustainable Development Goals (SDGs) of the United Nations, developed in 2015 (United Nations, 2015). Increasing income is argued to be one of the pillars that is needed to reach a sustainable food system (van Berkum et al., 2018). Recently, insufficient income is argued increasingly to be the core reason behind a multitude of (sustainability) issues (Boysen et al., 2021; Fountain & Huetz-Adams, 2020; Waarts & Kiewisch, 2021). This is in line with the argumentation of Kroll et al. (2019) that SDG 1, no poverty, is the most interrelated SDG of all. Poverty is argued to be both the cause and a result of challenges and issues in the sector (Waarts & Kiewisch, 2021).

The poverty trap, a negative spiral that many smallholder farmers are stuck in, is also related to these problems (van Berkum et al., 2018). The poverty trap is often referred to as the vicious circle where income is too low to engage beyond day-to-day struggles, causing the inability to enhance financial and human capital in a way to increase income (Ghatak, 2015). To escape the poverty trap, external interventions are needed (Sachs et al., 2004). Although the poverty trap is mainly considering low productivity, Fountain and Huetz-Adams (2020), amongst others, argued that the scope of the problem is bigger than that. However, it is argued that increasing the income of smallholder farmers can break this vicious circle (Wessel & Quist-Wessel, 2015) and address multiple issues in the sector (Fountain & Huetz-Adams, 2020).

In literature, multiple interventions have been presented with aiming to increase the income of smallholder cocoa farmers in Ghana. Interventions related to increasing price and productivity are used most often (van Vliet et al., 2021). However, it is acknowledged that these interventions on their

own will not close the living income gap for most smallholder cocoa farmers in Ghana (Bymolt et al., 2018; Kiewisch & Waarts, 2020; van Vliet et al., 2021). Furthermore, they have their drawbacks and challenges (Bymolt et al., 2018). Most of this research used a quantitative approach.

Fountain & Huetz-Adams (2020, p.13) stated that “despite two decades of sector-wide efforts, interventions, an increasing dialogue and inclusion, the challenges remain as large as they have ever been”. This is also related to the fact that not one main challenge or barrier to ending poverty has been established. Gneiting and Sonenshine (2018) for example argue that the core problem lies in the limited power of smallholders to participate in the market and the inability to make the proper investments. On the other hand, it is often argued that productivity lies at the core of the challenge (Hainmueller et al., 2011; Tiftonell & Giller, 2013). Furthermore, women have gender-specific income barriers like restricted access to services and discriminatory social norms (Bymolt et al., 2018; Gneiting & Sonenshine, 2018).

Living income was introduced by the Living Income Community of Practice as a benchmark for sufficient income. The concept is increasingly used by academics, the cocoa industry and the Ghanaian government. It 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” (Living Income Community of Practice, n.d.). Four pillars are taken into consideration, decent housing, sufficient nutritious intake, a variety of other essential needs and resilience to unexpected events (LICoP, n.d.).

Living income is argued to be a better benchmark to use as a minimum for poverty, as receiving a living income allows households to have decent livelihoods (LICoP, n.d.). When smallholder farmers receive a living income, it will be easier for them to escape the poverty trap (van Berkum et al., 2018). Furthermore, it is considered necessary for the transition to enhancing all three pillars of sustainable development (Kiewisch & Waarts, 2020; van Vliet et al., 2021). However, limited research has been presented on the topic of living income regarding smallholder cocoa farmers in Ghana as the concept is relatively new.

1.2 Problem statement

There is consensus in the literature on the fact that most smallholder cocoa farmers in Ghana are living in poverty. Furthermore, this low income is argued to be the core reason behind unsustainable situations in the cocoa sector. Therefore, the problem of the living income gap is crucial to address to ensure a proper living situation for farmers and a sustainable cocoa sector. Since living income is a relatively new concept, little research has been conducted on closing the living income gap specifically. Research rather focussed on farm productivity levels or uses the World Bank extreme poverty line.

Furthermore, research on the income of smallholder cocoa farmers has often been based on quantitative methods. Quantitative research deducts whether an already existing theory is (in)correct using numerical data. However, these methods are not able to create a comprehensive overview of context-specific reality (Patten & Newhart, 2017). Qualitative research would be beneficial to the cocoa sector as it can add context-specific insights and provides valuable insights into proven practical examples (Patten & Newhart, 2017).

This thesis focussed on the question of how the living income gap can be closed for smallholder cocoa farmers in Ghana. This is relevant considering the importance of a proper livelihood and the lack of research on closing the living income gap. In line with the qualitative approach that was taken, interviews were conducted with multiple stakeholders to provide new insights into the discussion. The insights from these interviews with initiatives were compared to literature related to closing the living income gap for smallholder cocoa farmers in Ghana.

Chapter 2: Interventions to close the living income gap for smallholders in the Ghanaian cocoa sector: a literature review

2.1 Context

In the past decades, the overall economic situation in Ghana has improved (ISSER, 2021). This economic growth has mainly been attributed to the cocoa sector, as most people are employed in this sector (Kumi & Daymond, 2015). Most government income in Ghana originates from the cocoa sector (Food and Agriculture Organisation, 2018). The Ghanaian economy benefits from increased yields, due to an increase in total supply which will increase total export value (FAO, 2018; ISSER, 2021). In 2017, 85% of the total harvest value came from cocoa (ISSER, 2021).

To ensure stability in the sector, the Ghanaian government has implemented multiple strategies over the years (Boysen et al., 2021; FAO, 2018; Kolavalli & Vigneri, 2017). Poverty rates in Ghana's rural areas declined between 1990 and 2005 (Bockel et al., 2021; Kolavalli & Vigneri, 2017). For cocoa farmers, this has been 36% (Kolavalli & Vigneri, 2017). Between 2000 and 2017, yields have more than doubled arguably due to enhanced government programs focussing on the cocoa sector (Food and Agriculture Organisation, 2018). However, since 2017, the total quantity of produced cocoa has decreased. Furthermore, the world price has decreased, but due to government interventions, the national prices remained stable. Total export value increased in 2020 compared to 2019 (ISSER, 2021). Within the cocoa sector in Ghana, there is still room for improvement compared to countries like Côte d'Ivoire, Indonesia and Malaysia, especially in terms of productivity (Bockel et al., 2021; Kolavalli & Vigneri, 2017; Kumi & Daymond, 2015).

The cocoa sector in Ghana is closely regulated by the government. The Ghanaian governmental institute that oversees the cocoa sector is called the Ghana Cocoa Board (Cocobod). It was established in 1947 and is state-run (Boysen et al., 2021). They purchase all cocoa in the market, are responsible for quality regulation and provide all the inputs. Fixed prices are used, which are determined before every season (Bymolt et al., 2018). This price is determined by the world market price (Boysen et al., 2021).

2.2 Living income

As explained in the introduction, living income is a relatively new concept to indicate the minimum sufficient income. Rather than the national minimum wage or the poverty lines of the World Bank, living income has increasingly been used as a benchmark for sufficient income (Waarts et al., 2021). It is used by academics, the cocoa industry, and the Ghanaian government. However, the research using it is still limited. Living Income Community of Practice (n.d.) defined living income 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". In the calculations, not only the income from cocoa farming is taken into account, but also different forms of income for example off-farm activities (Tyszler et al., 2019).

The concept of living income is in line with international human rights standards (Minos, 2018). Ensuring a living income for smallholder farmers will help in the progress toward Sustainable Development Goal 1, no poverty, and 2, zero hunger (van de Ven et al., 2021).

According to van Vliet et al. (2021), 73 to 90% of Ghanaian cocoa farmers do not earn a living income. Three different data sources were used in this research, therefore a range is provided. According to Smith (2018), 17% of cocoa farmers met the living income benchmark. These calculations included all cocoa farmers. This percentage is likely lower when only smallholders are taken into consideration.

Fountain and Huetz-Adams (2020) argued that the calculation of the living income reference price is based on incorrect data. They calculated the living income reference price to be 3,116 USD per metric ton. While living income the same method is used for calculations, difficulties arise here regarding the data that should be used (Tyszler et al., 2019). The used methods were also criticised by van de Ven et al. (2021). They proposed a different, less complicated method to calculate living income. However, for this thesis, the exact method of calculations of living income and data sources are not relevant, since the research is qualitative rather than quantitative.

Waarts and Kiewisch (2021) consider two perspectives to the so-called living income challenge, the absolute number of farmers not earning a living income and the total gap that exists between the current income and their calculated living income. They argued that taking the average living income gap can give wrong interpretations of poverty since a minority of farmers is possibly high performing.

2.3 Interventions to close the living income gap

The amount of literature that specifically focusses on the effect of interventions on closing the living income gap is limited. However, many interventions have been researched on poverty in general or on the improvement of livelihoods (van de Ven et al., 2021). Consensus on the need to improve the income of smallholder cocoa farmers in Ghana arises in literature (Asamoah et al., 2013; Bymolt et al., 2018; Kiewisch & Waarts, 2020; van Vliet et al., 2021), both from a social perspective, giving the farmers better livelihoods (van de Ven et al., 2021), as well as to provide sustainable food production in general (van Berkum et al., 2018). Low income is argued to be the core reason behind multiple key issues in the sector (Boysen et al., 2021; Fountain & Huetz-Adams, 2020; Waarts & Kiewisch, 2021).

The research that has been published should be looked at critically. Waarts et al. (2021) pointed out that the available studies likely overestimate the impact of their interventions as drop-outs of projects were not included, and research on failed projects was not published. Furthermore, they argued that

not all farmer groups are included in the research. This argument was supported by van Vliet et al. (2021) that stated the interventions likely reach the more organised and bigger farmers and are helpful to them. However, the smallholders that are already struggling, are less likely to reach the living income benchmark (Waarts & Kiewisch, 2021).

According to van Vliet et al. (2021) increasing prices, and increasing yield are the two interventions most mentioned to increase income and reach a living income. Both have their drawbacks and challenges (Bymolt et al., 2018).

In 2019, 7% of the consumer price reached the cocoa farmer (Solidaridad, 2020). As the Cocobod determines the cocoa price seasonally (Boysen et al., 2021), influencing the prices is considered difficult. Bymolt et al. (2018) argued that raising prices can be effective. However, increasing prices will, according to van Vliet et al. (2021), likely not help smallholder farmers with the lowest current incomes. The benefits will mostly be gained by farmers with a higher income already. Also, they argued that raising prices will not permanently improve the situation of the poorest cocoa farmers, although it can be of great value to them (van Vliet et al., 2021). Furthermore, Bymolt et al., (2018) emphasised the possibility that with a higher price, farmers expand their land area through for example deforestation. Consensus seems to be present that increasing prices alone, will not offer a long-term solution (Bymolt et al., 2018; Kiewisch & Waarts, 2020; van Vliet et al., 2021).

Certification premium also aim to increase the price received for production and is considered an intervention to increase income (Offermans & Glasbergen, 2017). Certification schemes provide certain sustainable production methods and if they are applied a premium is rewarded. It is debated whether these certification schemes can effectively change the sector regarding income, but also the implementation of sustainability standards (Paschall & Seville, 2012).

Besides price, improved productivity is claimed to lead to increased income (van Vliet et al., 2021). Some researchers argued that a yield gap is present in Ghana as the average yield of cocoa farmers lies around 400kg/ha (Kongor et al., 2018), while the potential yield is estimated to be 1500-2000 kg/ha (Aneani & Ofori-Frimpong, 2013). Claims have been made that closing this yield gap through intensification will lead to an increase in income (Aneani & Ofori-Frimpong, 2013; Kongor et al., 2018; Laven & Boomsma, 2012). As opposed to prices, van Vliet et al. (2021) argued that productivity-enhancing interventions will help the most poor cocoa farmers more than the bigger ones as their yields are currently small.

However, a combination of low cocoa prices, high input prices, the lack of access to loans and credits, and small farm sizes are argued by Wessel and Quist-Wessel (2015) to be the barriers for smallholder farmers to reach their full potential in terms of productivity. Furthermore, barriers concerning

investments arise for the poorest farmers, as well as a lack of services like capital and labour (van Vliet et al., 2021). Abdulai et al. (2020) found that yield gaps increased with the age of the farmers. This is attributed to decreasingly effective management practices according to Aneani and Ofori-Frimpong (2013). Furthermore, the productivity of a farm decreases when farm sizes are too small (Abdulai et al., 2020).

Vanlauwe et al. (2014) emphasised the need for sustainable intensification where it is important to help the farmers create a buffer against unexpected shocks and keep them from expanding their lands through deforestation. Through optimising management strategies, Vanlauwe et al. (2014) considered this possible. Besides the premium that certification schemes offer, certified farmers receive more training and therefore have increased productivity compared to non-certified farmers according to Ingram et al. (2018).

On the other hand, a broad application of intensification will increase total supply. Increasing supply usually drives down the world market price and therefore farm gate prices (Food and Agriculture Organisation, 2018), the price that farmers are receiving for their products. This process relates to basic supply and demand theory first introduced by Adam Smith (1776). When the supply of cocoa increases on the world market, not all demanders are willing to pay the equilibrium market price at that moment. Therefore, the price will decrease below the previously established equilibrium, to sell all supply. However, this process is affected by many factors simultaneously and therefore hard to predict. Therefore, Macek et al. (2018) argued that long-term supply strategies should be implemented by the government to prevent oversupply.

Consensus seems to be present on the fact that just increasing price or productivity will not address the issue of poverty in the long term. Furthermore, these interventions are likely to push for unsustainable practices like land conversion, child labour and deforestation (Waarts & Kiewisch, 2021). Structural and holistic changes are argued to be needed to better the situation of smallholder cocoa farmers in the long run (van de Ven et al., 2021; van Vliet et al., 2021; Waarts & Kiewisch, 2021; Wessel & Quist-Wessel, 2015).

Interventions around income diversification are another way to increase the income of smallholder cocoa farmers in Ghana (van Vliet et al., 2021). This can be done by differentiating in crops cultivated, also called on-farm diversification, or non-farm activities (Alobo, 2015). In this way, the resilience of the household will be increased, food security increases and the availability of nutritious food (Bymolt et al., 2018). It is also argued that income diversification can be a way to escape the poverty trap as the additional income stream provides the money to invest in certain resources (van Vliet et al., 2021).

However, farmers need investment opportunities first to be able to start up diversification activities (Alobo, 2015; van Vliet et al., 2021).

Attipoe et al. (2021) stated that income diversification activities can also lead to decreasing motivation to farm when farmers participate in off-farm income-generating activities. However, the research of Alobo (2015) did find an increased income with diversification activities.

Being part of a cooperative is also argued to be beneficial. The most commonly mentioned benefits are access to inputs and finance, better market information and better pricing regulations (Oomes et al., 2016). Dalberg and Wageningen University (2018) argued that long-term relationships with farmer groups can enhance the effectiveness of other interventions. However, Bernstein et al. (2019) argued that concluding their systematic review, interventions aiming to strengthen organisations and other groups do not have a positive impact on income.

Many cocoa farmers in Ghana are not part of a cooperative. According to Bymolt et al. (2018), 11% of the households had a family member part of a producer group. Many arguments have been made about possible reasons behind this. Hainmueller et al. (2011) for example stated a lack of trust and Laven and Boomsma (2012) appointed the lack of benefits coming with the scale, as the sector is highly regulated as the main problem.

Unnikrishnan et al. (2022) argued that the implementation of proper trainings for youth will increase their motivation to farm as well as their ability to perform sustainable practices on the farm. This can ensure succession and increase productivity. Attipoe et al. (2021) stated as well that properly educated people can provide the right services to smallholder cocoa farmers.

According to Martey et al. (2019), the efficiency of input usage increases when there is sufficient access to credits for smallholder farmers. Dawuni et al. (2021) argued that the rural poor, also smallholder cocoa farmers, experience difficulties to obtain credits as they do not have the capabilities required by the financial institutions.

Many smallholder cocoa farmers are not able to reach a living income, despite many different interventions according to Waarts et al. (2021). The main reason for this is their small plot sizes. It is argued that regulation should be enhanced to solve this issue, but it means that not all farmers can continue as a farmer (Waarts et al., 2019). Bymolt et al. (2018) emphasised the diversity of smallholder cocoa farmers. Therefore, a combination of multiple interventions, customised to specific farmers is needed to ensure at least some increase in their income according to Dalberg and Wageningen University (2018).

2.4 Initiatives aiming to close the living income gap

Many different interventions discussed in section 2.3 are considered to close the living income gap. In practice, closing the living income gap for smallholder cocoa farmers in Ghana is challenging. The barriers that need to be encountered are structural at a multitude of levels. Also, many actors are involved (Gneiting & Sonenshine, 2018). Five different stakeholder groups aiming to close the living income gap were identified. They are explained in the following subsections.

2.4.1 Sustainability initiatives

Many different initiatives are present to address sustainability issues. For West Africa, most of these initiatives began in the mid-2000s (Ingram et al., 2018). Ingram et al. (2018) identified four types of sustainability initiatives that address problems in the cocoa sector. They are presented in table 1. First, Voluntary Sustainability Standards (VSS). Often, they involve multiple stakeholders like producers, retailers and NGOs. Often they take the form of certification schemes.

Table 1 - Explanation of different sustainability initiatives (Ingram et al., 2018, p.3)

Type of sustainability initiatives	Explanation
Voluntary Sustainability Standards (VSS)	“Programmatic in nature, and consist of different interlocking mechanisms of which the most important are standards (codes of conduct), internal management system requirements to allow for group certification, traceability requirements, and systems, independent verification, and consumer facing labels” (Ingram et al., 2018, p.3). They mostly take the form of certification schemes (Ingram et al., 2018).
Individual corporate initiatives	“A form of corporate social responsibility and self-regulation, whereby a business monitors and ensures active compliance with the spirit of the law, ethical standards, and national or international norms. A firm may engage in actions that appear to further a social or environmental good, beyond the interests of the firm and that required by law” (Ingram et al., 2018, p.3).
Platforms, networks and associations	“Refer to partnerships of private, public, research, and/or civil society (CSO) or non-governmental (NGO) organisations collaborating on a common goal of sustainability with a declared policy or programme and plan of action” (Ingram et al., 2018, p.3).
NGO and CSO campaigns	“They have aimed to raise awareness and lobbied for changes on a sector and chain scale” (Ingram et al., 2018, p.3).

Secondly, there are individual corporate initiatives. An example of an industry initiative is Tony’s Chokolonely. They collaborated with 8,921 farmers in Ghana and Côte D’Ivoire in the 2020/2021 season. They pay their farmers a premium that equals the difference between farm gate prices and Living Income in the form of a direct cash payment (Tony’s Chokolonely, 2021) However, Tony’s Chokolonely recognises that these direct payments on their own will not be able to close the Living Income gap. They say that this is a shared responsibility of the whole cocoa sector (Tony’s Chokolonely, n.d.-a).

Third, platforms, networks and associations come forth from partnerships between private, public, academic, civil society (CSO) and/or non-governmental (NGO) organisations. The fourth type is NGO and CSO campaigns aiming to raise awareness. This typology is not exhaustive, and certain initiatives can overlap with more initiatives.

2.4.2 Government interventions

Besides the above-mentioned initiatives, the government is also considered an important stakeholder to close the living income gap for smallholder cocoa farmers in Ghana. Especially Cocobod, as they have a major influence on the sector. They have implemented multiple interventions over the years that aim to reduce poverty.

One of the focuses of Cocobod has been on increasing the share of the export prices (Kolavalli & Vigneri, 2017; FAO, 2018). While this has been successful (Kolavalli & Vigneri, 2017), it is also argued to not be enough yet to get most cocoa dependent households out of poverty (Bymolt et al., 2018; FAO, 2018). Multiple efforts have ensured proper cocoa production in the country. On the other hand, it has also enhanced the expansion of areas that are used for cocoa (Wessel & Quint-Wessel, 2015) which likely has led to increased deforestation (Kolavalli & Vigneri, 2017).

Another government programme is the Cocoa Pest and Disease Control (CODAPEC) program which was initiated in 2001. According to Kumi & Daymond (2015), it has successfully increased yields and with that income and livelihoods of more than half of the participating farmers. This was contested by Odei (2021), who stated that CODAPEC has been unsuccessful concerning an increase in productivity. A common struggle with programs like this is the reach, as not every farmer, especially smallholders, is willing or able to participate. However, public initiatives like this do have the potential to increase income (Kumi & Daymond, 2015). The FAO (2018) also recognised this potential.

In the 2020/2021 season, the Living Income Differential (LID) was introduced by the Cocobod (Boysen et al., 2021). Cocoa buyers need to pay the LID, currently 400 USD per metric ton, to cocoa farmers to guarantee a fixed price (Kiewisch & Waarts, 2020). In this way, the farm gate prices are driven up to reach a living income (Boysen et al., 2021). In the 2020/2021 season, the LID led to a farm gate price of just above 1,820 USD per metric ton of cocoa, which the Ghanaian government argues to be the living income reference price (Boysen et al., 2021). This measure also includes a stabilisation fund to save up when the farm gate price is high, and to spend when they are low (Boysen et al., 2021).

Since this measure is relatively new, not a lot of research has been done on its effects of this measure. According to Boysen et al. (2021), the implementation of the LID has a negative influence on government budgets and can harm the welfare of cocoa farmers in different countries. This depends on the actual implementation of the specifics and multiple additional policies. However, the research

does see an increase of income. It can be argued that the reference price of 1820 that the government uses is not enough to reach an actual living income (Fountain & Huetz-Adams, 2020).

2.5 Integrated approach

Dalberg and Wageningen University (2018) stated that to increase the income of smallholder farmers, partnerships with multiple stakeholders are needed. According to Waarts et al. (2021), all stakeholders have a role to play to close the living income gap for smallholder cocoa farmers in Ghana. Therefore, it is important to consider them all when analysing solutions to the problem. Van Vliet et al. (2021) argued that the needed structural change in the sector is the responsibility of the government together with the cocoa companies.

The amount of multi-stakeholder initiatives has been increasing since 2017. However, due to their voluntary nature, their successes have been limited (Fountain & Huetz-Adams, 2020). They also argued that there is an “unbalanced distribution of risk and responsibility in the supply chain” (Fountain & Huetz-Adams, 2020, p. 14).

Furthermore, Fountain & Huetz-Adams (2020) argued that the missing stone in the living income debate is a sector-wide commitment. This is in line with Waarts and Kiewisch’s (2021) argument that an integrated approach is needed to close the living income gap. Multiple actors and multiple interventions need to be included to create a shared vision for the future. Also, a holistic approach is needed (Hainmueller et al., 2011; Ingram et al., 2018; van de Ven et al., 2021; Waarts & Kiewisch, 2021; Wessel & Quist-Wessel, 2015).

2.6 Conclusion

Many smallholder cocoa farmers in Ghana do not reach a living income, the minimum benchmark for a decent living. Closing this living income gap is considered necessary to reach a sustainable cocoa sector. However, considering the novelty of living income in the discussion around problems related to the cocoa sector, the implementation and effectiveness are still debated. Also, no consensus is present on the effectiveness of discussed interventions for farmers to earn a living income. Lastly, no clear path to closing the living income gap has been established.

Multiple different stakeholder groups are trying to close the living income gap. Five were identified, the four sustainability initiatives of Ingram et al. (2018) presented in table 1, and the government. Sources argued they need to work together through multi-stakeholder collaborations.

2.7 Aims and objectives

Considering the importance of proper livelihoods and the lack of research on how the living income gap can be closed, this thesis analysed how the living income gap can be closed for smallholder cocoa farmers in Ghana. Through analysing multiple initiatives aiming to close this living income gap, a

contribution was made to the current debate. The following aims and objectives were determined for the research:

- To identify what interventions are presented in current literature that state to close the living income gap of smallholder cocoa farmers in Ghana.
- To find out how practical examples aim to close the living income gap for smallholder cocoa farmers in Ghana.
- To gain contextual insight on opportunities and challenges regarding closing the living income gap of smallholder cocoa farmers in Ghana.
- To compare the interventions of practical examples with literature on interventions to close the living income gap of smallholder cocoa farmers in Ghana.
- To provide recommendations to the whole cocoa sector on opportunities and challenges for initiatives aiming to close the living income gap of smallholder

2.8 Research questions

Following the mentioned aims and objectives, the main research question was formulated as:

What insights into how to close the living income gap for smallholder cocoa farmers in Ghana can be obtained from analysing current initiatives?

To answer the main research question, the following subquestions were identified:

1. What interventions are identified in current literature to close the living income gap and why are they identified as effective or not?
2. Which initiatives aiming to close the living income gap for smallholder cocoa farmers in Ghana can be identified, and what do they exactly do?
3. How do these initiatives aim to close the living income gap for smallholder cocoa farmers, and what opportunities and barriers are encountered in the process?
4. What are the similarities and differences between the proposed interventions cited in literature to close the living income gap and the findings from identified initiatives in Ghana with the same objective?
5. What shortcomings regarding the living income approach are provided by the initiatives and how can research contribute to these challenges?

Chapter 3: Methodology

This chapter presents the methodology used for this research. First, the research approach is presented, which will justify the chosen methodology. After that, an explanation is provided on which practical examples are included. Also, the procedure regarding the interviews is explained and how they are analysed. Lastly, the main limitations of this research are discussed.

3.1 Research approach

To identify insights into approaches to close the living income gap for smallholder cocoa farmers in Ghana, a case study was performed on initiatives aiming to do this. A case study is a detailed analysis of a single phenomenon (Flyvbjerg, 2011) that provides the opportunity to research complex situations and find connections that influence them (Patten & Newhart, 2017). The literature review formed the basis of the research as new findings were connected to already existing knowledge (Patten & Newhart, 2017).

A constructivist research approach was taken, recognising that the world is socially constructed by the perception of the people living in it. Each individual and group holds their truth (Offermans & Glasbergen, 2017). Constructivism was a logical choice since smallholder cocoa farmers are diverse (Bymolt et al., 2018), requiring context-specific solutions. Hence, a qualitative research approach was taken that provides context-specific insights into the literature review. Qualitative data provides insights into the local context because it can unravel insights into fields that have not extensively been studied yet (Patten & Newhart, 2017).

Furthermore, a systems thinking approach was taken. Systems thinking was defined by Arnold & Wade (2015, p. 675) as “a set of synergistic analytic skills used to improve the capability of identifying and understanding systems, predicting their behaviours, and devising modifications to them in order to produce desired effects. These skills work together as a system”. In this way, the root of a problem could be addressed by creating an understanding of the deep system’s structures and providing solutions that trigger the systemic change needed in the cocoa sector (Posthumus et al., 2018).

3.2 Integrated food systems framework

Following the objectives of this research and the literature review, it was concluded that the theoretical framework used to answer the research question should be able to take a broad, holistic perspective towards the cocoa sector and its activities. Furthermore, it should be actionable as the research aims to provide recommendations to practitioners. In line with these requirements, a food systems approach was taken to analyse the data.

According to van Berkum et al. (2018), analysing problems using the food systems approach can ensure sustainable solutions. The triple bottom approach is considered (Ericksen, 2008) where besides the

production activities, socio-economic and environmental aspects are included (van Berkum et al., 2018). Through the systematic approach, the most relevant processes of a system can be identified and addressed (Ericksen, 2008). The interventions executed by different stakeholders can be analysed in the food system approach. Furthermore, this approach is considered relevant to define processes needed to ensure desired food system outcomes Borman et al. (2022).

Figure 1 presents the integrated food systems framework of Borman et al. (2022) that was used. This integrated food systems framework aims to “connect practical activities with desired outcomes and assess the extent to which activities deliver these outcomes or whether intervention is needed” (Borman et al., 2022, p.3). Sector activities are specifically included within the sector framework which is a subset of the food systems framework (Borman et al., 2022). In this way, it is possible to understand dynamics on a sector level. Therefore, the framework can be used to study subjects that relate to food in general, but also on a smaller level as for example a country or sector.

The integrated food systems framework provided the opportunity to incorporate trade-offs and feedback loops between the cocoa sector and the entire food system to look at system outcomes (Borman et al., 2022). Furthermore, “the integrated framework emerges as an instrument to guide stakeholders in the transformation of agricultural sectors for attaining multiple and interconnected food system outcomes” (Borman et al., 2022, p.10). Therefore, the framework is particularly relevant to formulate recommendations for practitioners in the cocoa sector that are context-specific and actionable.

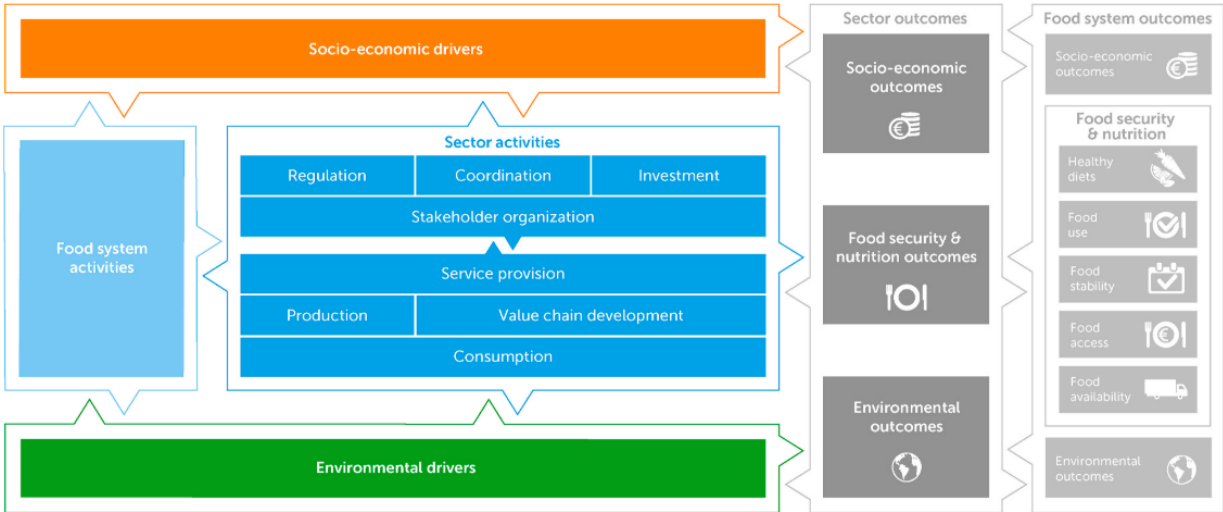


Figure 1 -Integrated Food Systems Framework (Borman et al., 2022)

The definitions of the sector activities are specified in appendix 1. Activities, drivers and outcomes are identified to understand the relationships and feedback loops that occur between them. Arrows indicate the underlying interactions. Within this framework, the sector is categorised into eight

different activities. These activities are influenced by socio-economic and environmental drivers. All activities in the food system can have an impact on the food systems outcomes and on the drivers. The interactions are prone to feedback loops (Borman et al., 2022).

The outcome of interest for this thesis is socio-economic as the living income gap is analysed. The system outcomes themselves also interact with each other (van Berkum et al., 2018). Income can both be a driver and an outcome of the food system (Ericksen, 2008). These characteristics are in line with the argument that an increased income will likely solve multiple issues in the cocoa sector (van de Ven et al., 2021, van Vliet et al., 2021; Waarts & Kiewisch, 2021; Wessel & Quist-Wessel, 2015).

It was chosen to look at the eight sector activities specifically rather than using the whole framework. The initiatives analysed aim to close the living income gap by influencing the sector activities. To form recommendations for the sector, this is the subset of the framework that is most relevant to analyse.

3.3 Interviews

Initiatives aiming to close the living income gap for smallholder cocoa farmers in Ghana were used to answer the research questions. People from these initiatives with functions related to cocoa and living income were reached out to. To identify the initiatives included in the research, first, an overview was made of initiatives aiming to close the living income gap for smallholder cocoa farmers in Ghana. Two selection criteria were used for this. First, the initiatives must be working in the cocoa sector and working on increasing the income of smallholder cocoa farmers in Ghana. Secondly, they should (implicitly) work with the concept of living income, as that is the main focus of this research.

The initiatives listed were categorized into the five relevant stakeholder groups, the four different sustainability initiatives of Ingram et al. (2018) presented in table 1 and governmental initiatives. It was decided to reach out to initiatives from all five stakeholder groups. This multi-stakeholder approach is in line with the systems thinking approach that was taken. In that way analysed interventions are directed towards the whole system, rather than being particular to one example (Posthumus et al., 2018). Furthermore, literature stated that to solve the problems of poverty in the cocoa sector in Ghana, an integrated holistic approach is needed including all stakeholders (Hainmueller et al., 2011; Ingram et al., 2018; Waarts & Kiewisch, 2021; Wessel & Quist-Wessel, 2015). Multi-stakeholder approaches also provide the most effective solutions in the long run (Dalberg & Wageningen University, 2018).

In the first instance, the initiatives were reached out to through email. If no email address was known, InMail of LinkedIn was used to contact potential interviewees. In total, 26 emails and 13 LinkedIn messages were sent to people from 25 different initiatives. The emails include contacts obtained using snowball sampling, where interviewees were asked for relevant contacts within their network (Patten

& Newhart, 2017). In the end, 13 interviews with 12 different initiatives were conducted, providing the qualitative data used to draw conclusions. The list of participants per stakeholder group can be found in appendix 2. Appendix 2 also briefly explains what each initiative is doing.

Semi-structured interviews were considered the best approach because they combine careful consideration beforehand, with the ability to deviate and adjust the interview to the situation (Patten & Newhart, 2017). They also provide the opportunity to examine complex phenomena (Denscombe, 2012). The method is in line with the constructivist approach aiming to understand the context (Offermans & Glasbergen, 2017). It is recognised that a holistic approach is needed to find the right solutions for the problem (Gneiting & Sonenshine, 2018; Waarts & Kiewisch, 2021). The interviews from this research provided the opportunity to gain insights into the practical examples chosen for analysis and find out how they operate (Patten & Newhart, 2017).

Appendix 3 presents the interview protocol that was used. The questions were identified beforehand, based on the integrated food systems framework presented in section 3.2. Also, information using from the literature review was used. All interviews took place remotely through Microsoft Teams and were between forty-five minutes and an hour. Nine took place in English, four in Dutch. The interviews were recorded after consent was asked of the interviewee as listed in appendix 4.

3.4 Data analysis

The interviews were transcribed using the recording, the most common procedure according to Patten and Newhart (2017). The transcribed texts were considered the main source of data and are presented in appendix 5. For transcription, the non-verbatim transcription method was used. The interviews conducted in Dutch were first transcribed in Dutch and translated to English, using the online programme DeepL. One interviewee checked the transcript. Initials of the person speaking were put in bold before the spoken text.

The transcripts were coded to draw conclusions from the interviews. All transcripts were read multiple times. In the first instance, in vivo coding was used with the most important insights from the literature review kept in mind. In vivo coding is a form of inductive coding which ensures that the wording of the interviewee is not lost, providing the best representation of what was said in the code (Saldaña, 2008). After that, the codes were grouped into the interventions identified in the literature review. The remaining codes were grouped according to additional identified themes.

Data saturation occurs when additional data does not provide new themes and insights (Glaser & Strauss, 2017), in this case interviews. Due to the broad research topic and the inclusion of multiple stakeholders, data saturation was likely not reached on most topics. From each stakeholder group, only a limited amount of people were interviewed. More interviews are needed to reach data

saturation. However, as this is explorative research with as goal to provide first insights, this is not considered a major issue.

3.5 Limitations

The major limitations of this research are related to the interviews. Within the time frame, a limited amount of initiatives could be interviewed. Some initiatives did not respond to the request and others could not participate within the time frame. This possibly caused a lack of information to formulate a holistic approach to the problem. With more information, more insights would have likely been identified. Also, the conclusions could have been more verified as data saturation was limited.

The stakeholder group sustainability standards was specifically lacking. Sustainability standards in the form of certification schemes are often used in the cocoa sector in Ghana. Therefore, this stakeholder group would have provided more in-depth information on this topic. Furthermore, no interview was conducted with a farmer cooperative or organisation, although this group was indicated as important by multiple interviewees. Due to a lack of time they were not included in the research. Despite mentioned limitations, the conducted interviews did provide useful insights to formulate proper recommendations to how to close the living income gap for smallholder cocoa farmers in Ghana.

Furthermore, some information might have been misinterpreted or left out in the Dutch to English translation process of four interviews. The translations were checked briefly. Lastly, the interviews were recorded, which might have led to the interviewees not speaking freely and relevant information being missed.

Other limitations relate to the usage of the integrated food systems framework of Borman et al. (2022). This framework guided the main points of inquiry for the interviews and the questions were based on it. Therefore, the outcomes of the interviews were automatically directed towards the framework. Although the framework takes a broad perspective on closing the living income gap of smallholder cocoa farmers, this can still cause some bias in the outcomes. Certain aspects might have been overlooked.

Due to the scope of the thesis it was not possible to analyse the whole integrated food systems framework presented in figure 1. The eight sector activities from the integrated food systems framework were used as they are considered the most important part for the research topic. Results might have been slightly different if the whole framework was taken into consideration.

Furthermore, the framework does not include income generated outside of the cocoa sector. It has provided the needed holistic perspective on the stated problem. However, using this framework

neglected factors outside the cocoa sector in the analysis. Non-cocoa-related income streams were not considered, although they are included in the living income definition.

Another limitation is that the research does not verify the effects of the initiatives on ground level as no direct link with smallholder cocoa farmers in Ghana was made. The presented claims rely only on data presented by the initiatives interviewed. The consequence of this is that some important insights might be missing that are relevant for increasing income for these smallholder farmers.

Furthermore, one should be careful with generalising the conclusions of this thesis to different scenarios. Especially considering a qualitative approach was taken to an issue that has mostly been addressed quantitatively. Due to differing contexts, the outcomes might be different. The recommendations made can be used by initiatives outside the scope of this research. However, the qualitative inductive research design focuses on a limited number of initiatives alone.

Chapter 4: Aiming to close the living income gap - stakeholder perspectives on interventions, collaboration, and research

In this chapter, the results from the thirteen semi-structured interviews are discussed. A list of the people that were interviewed and a brief explanation of the initiative they are working for is presented in appendix 2. A food systems lens was used to analyse the interviews, meaning the eight sector activities presented in figure 1 and explained in appendix 1 were kept in mind.

4.1 Approach to the living income challenge

“Living income is of course, one of the most important, if not the most important, element in the sector”, declared misses van Roekel (personal communication, August 12, 2022). Many organisations have or are creating a special department focused on living income. For example, Beyond Beans is opening one at the end of 2022 (ibid.). However, Rupert Day (personal communication, August 10, 2022) explained that there are “different schools of thought” on the right solution to the living income challenge. Also, he argued that it is “an economic and a political conversation”, making it highly complex.

Jack Steijn (personal communication, July 29, 2022) argued that it is not known yet what the problem is as “the discussion at this moment is too much narrowed down to things people easily can explain, and they are not really solving the problems”. Hammond Mensah (personal communication, August 2, 2022) seconded that. He claimed that “the opportunity for the future [...] is to move away from what we have done in the last 20 years”.

Misses van Roekel (personal communication, August 12, 2022) stated that “there are so many different factors in living income. Actually sometimes in living income just everything together”. According to Gaël Lescornec (personal communication, July 29, 2022) “everyone needs to pay more in order to share the costs. So farmers earning a living income has a cost and that needs to be shared by everyone. [...] We're not going to reach living income of cocoa farmers if [...] we stay in the system, that benefits some and not others”. However, Michael Amoah (personal communication, August 16, 2022) stressed the role of the farmer himself as “carrying out activities has implications on his living income. So his actions and inactions has the effect on living income”.

Rupert Day (personal communication, August 10, 2022) stated that “thinking through a farmer lens and from a community lens is absolutely essential”. This view was complemented by Han Brouwers (personal communication, July 27, 2022) that stressed the need for a local approach as “you often have to deal with local regulations, local customs and habits. Many factors that can be complex”. And he argued that “if there is no change at the local level, it will always be difficult”. Solidaridad sometimes finds local obstruction from the government to their practices (ibid.). This was complemented by

Hammond Mensah (personal communication, August 2, 2022) as he stressed the need for “a system approach to solution development. So all the actors are present when the problems are identified and solutions proposed to them”. Besides that, Hammond Mensah stated that it is needed to look at the whole household as living income is calculated for the whole household (ibid.).

Bo van Elzakker (personal communication, August 4, 2022) brought a different vision for the future where the living income challenge is looked at using a landscape approach “with all the farmers in that landscape, rather than working only with farmers that are in a project [...] and not with the farmers who may need assistance the most”. Rupert Day (personal communication, August 10, 2022) also followed this line of argumentation by stating that “we need to think about it through a poverty alleviation lens rather than just a cocoa sector lens”. Bo van Elzakker (personal communication, August 4, 2022) stressed, however, that “we need a couple of more years to have a first landscape ready for multi-stakeholder participation and agreement”.

The approach that has to be taken to the living income challenge for smallholder cocoa farmers in Ghana is still debated amongst the stakeholder groups. Their opinions are differing due to the complexity of the situation. Arguably, a broader perspective needs to be taken in the form of a landscape approach, where the farmer is put at the centre. Also, it is stated that a community lens is essential to close the living income gap.

4.2 Interventions

In the literature review, multiple commonly practised interventions have been identified aiming to close the living income gap for smallholder cocoa farmers in Ghana. This section provides a synthesis of the results sorted per intervention. The analysis is supported by information gathered in the literature review. Additionally, some insights are provided on the effect of strengthening communities.

4.2.1 Increase productivity

The yield gap in Ghana is argued to be big (Aneani & Ofori-Frimpong, 2013; Kongor et al., 2018). In line with van Vliet et al. (2021) stating that productivity-enhancing activities are one of the two main interventions pursued, many initiatives have programmes focussing on productivity. According to Rupert Day (personal communication, August 10, 2022), “yield improvements remain a key challenge”. Michael Amoah (personal communication, August 16, 2022) explained that the government “target[s] to get at least a thousand kilos per hectare” and all their activities are focussed on that goal. Also, Hammond Mensah (personal communication, August 2, 2022) stated that within Solidaridad the “focus is on productivity” for “transitioning the farmers out of poverty” as “two of the leading factors are the volumes of cocoa that they produce and the price per kilo. So if you take the volume of cocoa that they produce, that is something that we as Solidaridad can control” (ibid.).

The interviewees acknowledged, just as VanLauwe et al. (2014) argued, that productivity enhancement should take place sustainably. For example, Bo van Elzaker (personal communication, August 4, 2022) stated that Agro Eco LBI is “trying all kinds of ways and means to increase production in a sustainable way”. Agroforestry was mentioned multiple times as a sustainable way to increase productivity, while at the same time providing the opportunity to diversify income. Misses van Roekel (personal communication, August 12, 2022) mentioned that “agroforestry, which of course improves production, as well as quality”.

Besides that, access to services is acknowledged to be “just pretty essential” to enhance productivity (Misses van Roekel, personal communication, August 12, 2022). Rikolto International is providing “permanent screening services” and Abdulahi Aliyu (personal communication, August 11, 2022) stated that that is “one of the things [...] that creates an avenue where farmers can have access to services. They get the services to serve them on their farms”. Daniel Otu (personal communication, August 11, 2022) stated that “the farmer also tends to have an opportunity when we do this vision of free chemicals to use and also pollination activities, with pollination we are able to increase yield massively from 50 to 100% yield increase because of the artificial pollination”.

Differing opinions were given on providing farmers services for free as a tool to increase productivity. Missel van Roekel (personal communication, August 16, 2022) pointed out that “you see that a lot here, farmers waiting for free things. And that is just not very helpful in terms of sustainability”. Bo van Elzaker (personal communication, August 4, 2022) agreed with this as he noticed that due to projects from the government and NGOs, farmers “got very used to be on the receiving end” and “the farmer is just waiting for the next thing to happen [...], not doing very much”. On the other hand, Daniel Otu (personal communication, August 11, 2022) argued that “the big corporations [...] should be able to pay for some of the services” as they are the ones benefitting from it.

Michael Amoah (personal communication, August 16, 2022) mentioned that reaching all farmers to participate in productivity-enhancing programmes can be challenging. Cocobod needed to do a lot of persuasion before a majority of the farmers was participating. He argued that this was due to low motivation (ibid.). This scepticism is also reflected by the statement of Daniel Otu (personal communication, August 11, 2022) that “there have been a lot of promises to farmers and cocoa. [New programmes] can also be one of those promise and fail thing. [...] So to win trust of farmers is not easy”.

Young people are considered a big opportunity for productivity enhancement activities, which was also recognised by Unnikrishnan et al. (2022). Bo van Elzaker (personal communication, August 4, 2022) noticed that most aged farmers are not able to do the most effective activities to enhance their

productivity and that “when a young guy, and women by the way, work on his farm that he can have three times higher production”. Therefore Agro Eco – LBI set up youth teams to provide the farmers with the needed services to increase productivity levels. In that way, they “hope that the farmer picks up, when he sees its output increasing. That the farmer starts working a little bit more while also the farmer becomes more healthy and knows more” (ibid.). Abdulahi Aliyu (personal communication, August 11, 2022) also acknowledged the importance of youth as he stated that “we need to be able to provide [youth] with the needed skills to tap, in order to create a vibrant labour service sector for local farmers in their communities”.

Hammond Mensah (personal communication, August 2, 2022) declared that besides enhancing productivity “if [youth] get employment, they get income and then it counts towards improving the household incomes”. He also stated that youth employment can make young people enthusiastic about the sector, which enhances succession (ibid.). Also, Agro Eco - LBI “work[s] with these youth teams to encourage the farmers to do succession” (B. van Elzakker, personal communication, August 4, 2022). Succession is considered an issue in the sector, as most farmers are aged, which negatively affects their productivity (Abdulai et al., 2020; Aneani & Ofori-Frimpong, 2013).

Just focusing on productivity will not be enough to close the living income gap for smallholder cocoa farmers in Ghana (van de Ven et al., 2021; van Vliet et al., 2021; Waarts & Kiewisch, 2021; Wessel & Quist-Wessel, 2015). The stakeholders also agreed with this. Gaël Lescornec (personal communication, July 29, 2022) argued that “if we want to start looking at moving the needle on their cash flow, on their business opportunities, we need to look at wider income drivers than just production”. One reason she mentioned is that “focussing only on production and productivity makes obviously the farmer, but also the cooperative, much more fragile because you're not looking at the household in itself and you're not looking at the farm holistically” (ibid.).

Productivity-enhancing interventions are broadly implemented in the Ghanaian cocoa sector. It is important to do this sustainably with for example agroforestry. Access to services and finance is limited for smallholder cocoa farmers although essential to increase productivity. The provision of certain services for free is still debated because it can decrease the motivation of farmers. Training youth to perform services for the farmers is considered an opportunity, as it increases yield, provides income and enhances succession. However, one should be careful to not only focus on productivity, as on its own it will not close the living income gap for smallholder cocoa farmers in Ghana.

4.2.2 Increase price

Van Vliet et al. (2021) stated that besides productivity, interventions aiming to increase prices are often implemented. Bymolt et al. (2018) stated that increasing prices is considered a major part of tackling

the living income challenge in the short run. Gaël Lescornec (personal communication, July 29, 2022) argued that “price is absolutely critical” and that she wishes “there was more focus on price. I think it is all very much productivity”. Mister Kwapong-Akuffo (personal communication, August 1, 2022) stated that “the focus should be more on price”.

Currently, prices are argued to not be high enough for smallholder cocoa farmers to earn a living income, although increasing prices will not offer a long-term solution (Bymolt et al., 2018; Kiewisch & Waarts, 2020; van Vliet et al., 2021). Han Brouwers (personal communication, July 27, 2022) declared that low prices are not only a problem occurring in Ghana's cocoa sector but a worldwide problem existing in multiple sectors. Hammond Mensah (personal communication, August 2, 2022) argued that “to what a fair price is, it is still under discussion”.

The exact mechanism behind price regulation, is considered hard to determine. Most commonly argued by the initiatives is that “[the price] is regulated, so anyway the farm gate price is just set by the Cocobod. So that is not something companies have an influence on” (Misses van Roekel, personal communication, August 12, 2022). If looking at classic economic theory as proposed by Adams (1776), the price is determined by supply in demand. However, Michael Amoah (personal communication, August 16, 2022) argued that “the market is not only determined by demand and supply. [...] Non-market fundamentals, have influence on the coca price and that is the big issue”. “If [the price] were to be determined by demand and supply then we can use our supply management strategies to influence the price”. “I will not say we have control over the terminal price. It is determined by other stakeholders” (ibid.).

In the 2020/2021 season, the Cocobod did implement the LID to increase the farm gate prices (Boysen et al., 2021). In literature, it is debated whether the LID will be able to successfully close the living income gap in the long run (Boysen et al., 2021). Michael Amoah (personal communication, August 16, 2022) stated that “because [of] the LID, we are able to increase the producer price by 28%”. However, he acknowledged that “the LID is not enough” and that it “is just a top-up. It does improve [the price], but the terminal price itself is no good” (ibid.).

Rupert Day (personal communication, August 10, 2022) emphasized the need for regulations from the government and sees the LID as a good thing as it tells the industry what they need to pay. On the other hand, Abdulahi Aliyu (personal communication, August 11, 2022) argued that it is important “to engage the private sector to look at additional ways of paying better prices to farmers. It could be through premium payment programmes or cash transfers”. He emphasised the need for collaboration to be able to do this. According to Rupert Day (personal communication, August 10, 2022), no agreement on this collaboration is currently present. He stated that related to the pricing, “the origin

governments have a very strong opinion that living income is an economic challenge [...]. The industry is also thinking that there is a broader solution” (ibid.).

Joost Claas (personal communication, August 10, 2022) stated that “with [Tony’s Chocolonely], the difference lies mainly in the fact that we really pay a high price”. He emphasized that it is possible to do this, but that “a company itself has a responsibility to do the right thing and take that step” (ibid.). Also, Michael Amoah (personal communication, August 16, 2022) emphasised the responsibility of the private sector. He argued that “when prices are going down, companies are pushing huge, huge profits. [...] How do you make sure that farmers also benefit from this huge profit”. The farmer needs to “get a greater share of the cake from cocoa” (ibid.).

Gaël Lescornec (personal communication, July 29, 2022) argued that “there is quite of a lot of different opportunities, I think, to address the how pricing can actually better work for farmers today”. She believes that new approaches to the way pricing can work better for the farmers “really needs to be a constructive arrangement between the governments and industry. And that is, I think, what we're actually seeing that momentum right now, which is quite positive” (ibid.).

One thing she mentioned is the timing of the payments (ibid.). As cocoa is a seasonal product, harvesting happens once a year, as well as the payment. This leads, according to Bo van Elzakker (personal communication, August 4, 2022), to farmers being “rich for three months and poor for nine months”. Therefore, more constant payments would benefit the farmer. Joost Claas (personal communication, August 10, 2022) stated that this is difficult for some companies because “they have to be more committed. And think a bit more about their bean volume. It also gives them a direct relationship”.

Farmers are arguably not included enough in the very public discussions about price. Mister Kwamong-Akuffo (personal communication, August 1, 2022) pointed out that “it is important that – besides the public and the private sector – the farmers and the civil society are adequately represented in those discussions”. In line with this, Jack Steijn (personal communication, July 29, 2022) argued that the “fact of the matter is that the farmer is not in a position to negotiate prices because he just has to sell to the Cocobod at the price that the Cocobod determines”. Hammond Mensah (personal communication, August 2, 2022) argued that the low negotiation power of farmers and farmer groups is not only an issue regarding price setting but also something that should be considered in general to close the living income gap.

“We are focussing too much on price paid for the cocoa at this moment”, according to Jack Steijn (personal communication, July 27, 2022), “instead of on other things that I think should also be taken

into account if you really want to intervene and improve the conditions of cocoa farming. Also, Rupert Day emphasized that “in some situations you can double, triple, quadruple the price of cocoa. And actually farmers would still not be earning a living income”. He argued that “some of that debate needs to be articulated a bit more clearly to understand [...] what else can the industry do?” (ibid.).

In addition to productivity-enhancing activities, price increases were discussed often by the interviewees as well as in literature. Some argued too much focus is on price, others too little. How prices exactly can be increased, and whose responsible, is still under discussion. There seems to be agreement on the fact that the negotiation power of farmers should increase, so they can be included in discussions about price. Furthermore, it is argued that different pricing mechanisms can help smallholder cocoa farmers earn a living income. Furthermore, Tony’s Chocolonely stands out, as they really pay a higher price for their purchased cocoa.

4.2.2.1 Premiums

Certification standards have been standardised for multiple industry players (R. Day, personal communication, August 10, 2022; Misses van Roekel, personal communication, August 12, 2022; J. Claas, personal communication, August 10, 2022), and are characterised by their premiums (Paschall & Seville, 2012). According to mister Kwapong-Akuffo (personal communication, August 1, 2022), GIZ sees certification schemes as an opportunity to explore. However, no consensus has been reached on the impact of certification schemes (Paschall & Seville, 2012).

With the implementation of certification and premiums, “there was a challenge in having a segregated value chain” as “this [...] is quite different from what Cocobod would normally do” (Mister Kwapong-Akuffo, personal communication, August 1, 2022). Jack Steijn (personal communication, July 29, 2022) pointed out that “cocoa can be segregated, but it is always an enormous investment”. Therefore, granting the premium can be hard, especially for new projects.

The foundation Fairfood offers a data premium to smallholder farmers, intending to lift them out of poverty. They recognised that “data is a commodity, an increasingly valuable commodity, which comes along with the product [...] and that, tragically, is being neglected.” (M. van Gils, personal communication, August 2, 2022). They want “to put the potential of that bag of data, the value of that bag of data, into the farmer's pocket” (ibid). This value of data is also recognised by Solidaridad (H. Brouwers, personal communication, July 27, 2022).

Marten van Gils (personal communication, August 2, 2022) noticed that more companies are willing to pay money to be able to make sustainability claims, amongst others concerning living income. However, he also argued that “not everyone understands yet that with data premiums you can both

move your brand forward and pay your farmers more” (ibid.). Challenges encountered are the determination of the value of data, as well as what data is exactly relevant for the companies (ibid.).

To make data and certification premiums, successful, traceability in the supply chain is key. However, this is considered a challenge (ibid.; Mister Kwapong-Akuffo, personal communication, August 1, 2022). According to Marten van Gils, traceability can be hard to demonstrate (personal communication, August 2, 2022). Han Brouwers (personal communication, July 27, 2022) stated that “there are now thousands and thousands of apps and other digital solutions but nothing is done with consolidation. [...] Because it is nice to develop another app for a farmer with all that comes with it. But if that data cannot then be exchanged because taxonomies are incorrect, data structures are not in place, there is no decent data analysis capacity because that is actually the big shortcoming.” This is also recognised by mister Kwapong-Akuffo (personal communication, August 1, 2022), the data systems throughout the whole supply chain are currently not interoperable, which is needed to ensure traceability. Van Vliet et al. (2021) recommended the sector to invest in developing one shared dataset.

It is possible to use premiums to increase income for smallholder cocoa farmers. Granting certification premiums can be challenging due to the difficulties that arise with the implementation of segregated supply chains. Data premiums, as implemented by Fairfood, are a new, innovative way to increase incomes. However, the valuation of data and traceability can be challenging. Proper functioning data systems should be in place to ensure traceability in the cocoa chain.

4.2.3 Income diversification

Abdulahi Aliyu (personal communication, August 11, 2022) argued that income diversification is crucial because “whether we like it or not, we need to have buffers”. Furthermore, Gaël Lescornec (personal communication, July 29, 2022) stated that IDH “do[es] not want the farmer to depend too much on cocoa, which is a risk due to economic volatility”. Furthermore, she said that income diversification is “an important, sustainable, long term approach [...] but it is definitely something that requires quite a bit of long term, and convening of different partners” (ibid.).

Income diversification can provide constant income, rather than the annual payment from seasonal cocoa production. In that way “every week [the farmer] can buy household necessities and improve the household [and] living conditions” (B. van Elzakker, personal communication, August 4, 2022). Jack Steijn (personal communication, July 29, 2022) emphasized that support is needed to help these farmers with income diversification. However, Hammond Mensah (personal communication, August 2, 2022) declared that income diversification on its own will not close the living income gap for smallholder cocoa farmers and more innovative ideas are needed for that.

The role of women in the household should be enhanced according to Hammond Mensah (ibid.) and Bo van Elzakker (personal communication, August 4, 2022). Abdulahi Aliyu (personal communication, August 11, 2022) argued that as the living income is talking about the total household income, “if less women are represented, it means that the income that is supposed to go to women will also be affected negatively”. Diversification of income is seen as an opportunity because “when these other incomes from diversification go through their wife and are regular” (B. van Elzakker, personal communication, August 4, 2022).

Income diversification can be done by differentiating in crops cultivated, also called on-farm diversification, or non-farm activities (Alobo, 2015). Within on-farm diversification, a division was made between crop diversification and diversification of cocoa bean usage. Off-farm income is not included in the food systems framework, as it goes beyond the cocoa sector and was not discussed.

4.2.3.1 Crop diversification

Diversification is “a very important element in the income model”, according to Joost Claas (personal communication, August 10, 2022). Gaël Lescornec (personal communication, July 29, 2022) noticed that “there is increasingly a lot of different companies and industries [that] realise that [...] there is a real win-win situation in developing, and being able to have multi-crop farming systems that different companies, industries can benefit from”.

Important to realise, according to Abdulahi Aliyu (personal communication, August 11, 2022) is the fact that “most of the farmers we are talking about, do not have the financial muscle to invest in diversification”. Furthermore, he stated that “without financing a farmer cannot invest in his own cocoa farm. Finding financing is critical to whatever we talk about as far as living income is concerned” (ibid.). Alobo (2015) and van Vliet et al. (2021) also recognised these challenges regarding income diversification.

If farmers do have the resources to invest, “the challenge is that you are investing but not selling” (J. Steijn, personal communication, July 29, 2022). To diversify, there needs to be a market according to Abdulahi Aliyu (personal communication, August 11, 2022). Rupert Day (personal communication, August 10, 2022) argued that “from a smallholder perspective, there is just so much structure and [...] pretty much a guaranteed market for [cocoa] production. Stepping outside of that for many farmers is a big challenge”. Also, the Cocobod “[does not] want [the farmers] to move from cocoa” as “you do not want to introduce them into a new venture where they go into it and there is no market, it cannot be sustained” (M. Amoah, personal communication, August 16, 2022).

Gaël Lescornec (personal communication, July 29, 2022) also emphasized this by stating that “having off-takers [...] that can really guarantee other markets outside of cocoa for diversification, is super important. But we have not yet seen [...] a large-scale opportunity to do that within the cocoa sector”. Misses van Roekel (personal communication, August 12, 2022) recognised that balancing market opportunities within a community is of the essence because when too many farmers producing one commodity, problems with market access might also arise. She emphasised that “it is important to provide guidance and to be careful not to make an investment that ultimately benefits no one”. Also, “it is of course important to give the farmer himself the ownership and to let him decide what he wants to work on and invest in” (ibid.).

For projects of Cargill, market access for crop diversification is a challenge as they do not work with different commodities than cocoa (R. Day, personal communication, August 10, 2022). However, Rupert Day (personal communication, August 10, 2022) mentioned that “the cocoa industry spent decades building up these empty structures in rural areas, supporting cooperatives, supporting farmer organisations. [Therefore], it is less risky for other organisations to come in and see what opportunities are also available” (ibid.). However, some cooperation is needed to establish these additional structures that can be used to enhance market access. Rupert day (ibid.) also argued that “it needs to be clear on sort of how cocoa plus others are brought together a bit more clearly”.

“Support from government [...] [is] really important” to help farmers diversify their crops, according to Rupert Day (personal communication, August 10, 2022). This is needed to understand “for the country in general what opportunities a) make sense and b) are part of a long-term rural development plan for that area, linked to government rural development plans”.

Jack Steijn (personal communication, July 29, 2022) argued that farmer cooperatives can play a role in providing access to markets. Currently, cooperatives are only off-takers of cocoa. To enhance income diversification it would be good if they can also purchase different commodities. Gaël Lescornec (personal communication, July 29, 2022) stated that in general “there is also a danger or risk in categorising farmers like cocoa farmers or cotton farmers or... Because the fact is that they need to identify the different opportunities that make them more profitable. And us trying to categorise and only investing in one commodity is a little bit risky”.

Furthermore, Jack Steijn (personal communication, July 29, 2022) identified agroforestry as “an important method for income generation”. Agroforestry can increase productivity and provide additional income sources through crop diversification. Furthermore, Bo van Elzakker (personal communication, August 4, 2022) identified as an opportunity that should be explored the “carbon

money coming up” where the farmer “can be paid through carbon credits, that these additional shade trees are sequestering”.

Lastly, farmers can diversify to crops suitable for consumption (Bymolt et al., 2018). As Abdulahi Aliyu (personal communication, August 11, 2022) put it, “food constitutes over 50% of the living income component. So even if you provide food, it means that you are contributing to over 50% of closing that gap”. Beyond Beans is working on income diversification activities focused on improving nutrition (Misses van Roekel, personal communication, August 12, 2022). With this, the challenges regarding market access do not apply. Furthermore, Bo van Elzaker suggested supporting to sell the commodities more locally and with that also improving the nutritional intake within the community as well as providing a market for the products (personal communication, August 4, 2022). Jack Steijn (personal communication, July 29, 2022) pointed out that smallholder farmers “have very small plots and either they grow cocoa or they grow food”, so for the smallest farmers crop diversification can be challenging.

Crop diversification can be an opportunity to close the living income gap for smallholder cocoa farmers in Ghana. The most important is to consider whether the diversified products have a market. The right training should be provided to the farmers where a balance needs to be found between farmer ownership and giving directions. As the cocoa sector in Ghana is arguably very structured, new companies can use existing infrastructure to access diversified commodities. When agroforestry is adopted as crop diversification strategy, it can also come with carbon credits. Lastly, additional crop production can also be used for consumption by the households themselves, or in the local community which also contributes to closing the living income gap. However, due to small plot sizes, diversification can be challenging for smallholder farmers.

4.2.3.2 Income diversification with cocoa bean usage

Opportunities also have been presented regarding gaining additional income from the cocoa bean itself. Daniël Otu (personal communication, August 11, 2022) argued that closing the living income gap for smallholder cocoa farmers is “about challenging the status quo”. KOA “realise[d] that there are parts of cocoa which still contributing to food waste and having effects on the environmental sustainability. So KOA decided to valorise the cocoa pulp, seeing that this was going to waste. Paying the farmers accordingly to the amount that was extracted”. In this way, the farmer gets 30% more income for their cocoa bean (ibid.).

KOA recognised that “because [the farmer] get[s] extra income, their affinity for farming is very high” (ibid.). However, they realised that to make sure the correct practices are applied, it is “important to

have clear regulations in place regarding what you want from the farmers and what the consequences are if they do not comply” (ibid.).

Daniel Otu (ibid.) explained that the demand for the products of KOA is exceeding the supply. Their main challenge is to gather the resources to scale up production quickly. Furthermore, they encounter risks in scaling up because of their dependency on the government to continue. He said that “once government puts in regulations or decides to stop us today, then we are in trouble” (ibid.).

Furthermore, the “risk of fermentation is very high to do this” (ibid.). Also, the fact that they “need a lot of logistics to be able to gather a lot of material from different farms [is] another challenge”. Furthermore, they noticed that it can be hard to reach all the farmers in an area as they “are working with smallholder farmers, unlike in Europe where farms are linear and rules are good. So it is easier to assess all those farms. Here you realise that the farms are scattered. They are no rules leading to the farm” (ibid.).

Hammond Mensah (personal communication, August 2, 2022) suggested that, besides companies like KOA, there should be looked more into the usage of more parts of the cocoa bean “and look at their commercial value and see what must be put in place so they can be commercialised. So that the farmers [...] can sell them and also make some money off it”.

Besides KOA, Hammond Mensah (personal communication, August 2, 2022) mentioned the implementation of fair ownership models “where cocoa farmers own part of the processing business” as another opportunity. In that way, the smallholder farmer “also partake[s] in the value that is created in processing and also in retailing. Because that is where the most value is created along the value chain”. He said that “we should create opportunities for these farmers to participate in that part of the chain as well”. This process is also called, forward integrating (ibid.). Gaël Lescornec also touched upon a redistribution of value in the chain. She argued that as long as “you do not redistribute the risk, the value, then there is just no way that farmers can actually reach a living income no matter how much you invest, no matter how much you focus on productivity, service, delivery, even price”.

Opportunities were identified regarding income diversification strategies within cocoa production. As KOA is proving, more products can be made from the cocoa bean and this can still be explored more. However, the process is still risky. The demand for these products is exceeding the supply but challenges occur with finding capital to scale up. Furthermore, fair ownership models, where the farmer owns part of the processing business, can cause a redistribution of value in the chain and close the living income gap for smallholder cocoa farmers.

4.2.4 Increasing household resilience

The before-mentioned interventions on price, productivity and income diversification all directly try to increase the income of smallholder cocoa farmers. Both literature and the interviewees pointed out that these interventions on their own are not going to provide the solution to the living income challenge for smallholder cocoa farmers in Ghana. As Hammond Mensah (personal communication, August 2, 2022) put it “the opportunity for the future in terms of closing the living income gap is to move away from what we have done in the last 20 years”. He stressed the need for innovative ideas (ibid.).

In the following sections, interventions aiming to increase household resilience are discussed. It is important to consider that these interventions, in line with Waarts et al. (2021) will also not be able to address the living income challenge on their own. The main activities pursued by the initiatives are interventions related to access to finance, farmer education, farmer organisation, and strengthening communities. Furthermore, it is argued that income diversification activities increase household resilience. This has already been discussed in section 7.3.3.

4.2.4.1 Access to finance

“Access to finance would open the doors to all sorts of instruments and services” according to mister Kwapong-Akuffo (personal communication, August 1, 2022). In the previous sections, the importance of finance for interventions has already been mentioned as it is considered the gateway to certain activities (Dawuni et al., 2021; van Vliet et al., 2021) and can enhance input efficiency (Martey et al., 2019). Jack Steijn (personal communication, July 29, 2022) mentioned that farmers “often do not have access to credit”

“There is very little incentive for farmers [...] to just invest generally in their farms. The costs are so high, they take on all the risks”, according to Gaël Lescornec (personal communication, July 29, 2022). Bo van Elzakker (personal communication, August 4, 2022), mentioned another problem, succession, as older people are often less motivated to invest in their farms.

Michael Amoah (personal communication, August 16, 2022) argued that if “there is financial inclusion, farmers will get access to credit and invest in their farms, to be attracted to input credit schemes”. He also recognised that regarding financial institutions, “it comes down to policy”. Therefore, Cocobod is introducing a system where “financial institutions [have] access to the farm history and the productivity of the farmer to enable the necessary credit analysis” (ibid.). The biggest challenge for Cocobod is finding funding to invest in schemes like these (ibid.).

Many initiatives are focussing on Village Savings and Loans Associations (VSLA). Abdulahi Aliyu (personal communication, August 11, 2022) mentioned that VSLA are “creating opportunities for cocoa

farmers in the communities to have funding to be able to finance the income diversification interventions, to be able to increase investment in their cocoa farms etc.". Rupert Day (personal communication, August 10, 2022) also recognised VSLA as an opportunity that should be explored more to enhance access to finance.

The VSLA programmes also offer additional benefits, besides access to finance. Misses van Roekel (personal communication, August 12, 2022) mentioned that "there is also a lot of capacity building through all the tools and training that we offer" through the VSLAs, which resulted in "a lot of farmers [being] able to invest in their own business". She also emphasised that "if you just give good guidance and training to that, then [the VSLA] is something that can continue in eternity". Furthermore, VSLAs offer the opportunity to train the farmers in smart decision-making regarding finance. Misses van Roekel (ibid.) emphasised the importance to empower the farmers to take this up themselves.

However, Jack Steijn (personal communication, July 29, 2022) observed that "it is not excluded but it is not easy" for smallholder farmers to get investments through VSLAs. Furthermore, Abdulahi Aliyu (personal communication, August 11, 2022) stated that "there are a lot of farmers who are still not having access to this type of structures. And even beyond that, those who have access to these type of structures are mostly left on their own". He identified the opportunity "to link them up to financial institutions" (ibid.).

Besides the VSLAs, other activities related to finance were carried out by the initiatives. One thing that Hammond Mensah (personal communication, August 2, 2022) noticed is that "because of the poverty levels of cocoa farmers, usually they are not able to pay for the services upfront". As a solution, he proposed to "pre-finance the services". The service provider needs to have access to credit to be able to do that. Therefore, Solidaridad "support[s] them to set up the proper internal structures so that they can raise capital from the formal financial sector" and "when the harvest comes in, then the cocoa farmers pay them [back]" (ibid.).

Another opportunity Gaël Lescornec (personal communication, July 29, 2022) mentioned is contracts, preferable long-term. They can provide a solution to many of the above-mentioned problems. Contracts ensuring cocoa sales make it less risky for financial institutions to invest in the farm. Also, it provides incentives to the farmer to invest. However, broad implementation of long-term contracts requires a long-term vision from both the industry and the government (H. Brouwers, personal communication, July 27, 2022).

Furthermore, it is important to consider access to finance for new innovative solutions. Daniel Otu (personal communication, August 11, 2022) mentioned that raising capital is an issue in the process of

scaling up. He mentioned that “as a start-up it’s about the capital to inject into the whole project” and “you need a lot of money to carry this out” (ibid.).

Access to finance is key to enabling a living income for smallholder cocoa farmers in Ghana. However, farmers don’t have this access or are not motivated to invest because it is too costly and risky. Currently, a lack of available information causes financial institutions to be reluctant. The implementation of VSLA in communities seems to be quite successful. They are also able to provide different services, like capacity building. Pre-financing and long-term contracts were also identified as opportunities.

4.2.4.2 Farmer training

As Waarts et al. (2021) argued, many interventions will not be able to close the living income gap on their own. Gaël Lescornec (personal communication, July 29, 2022) also stated that about farmer training. “If it is combined with other interventions then it has a much better potential to have an impact on incomes”. This is seconded by misses van Roekel (personal communication, August 12, 2022) who said that “just focusing on farmer trainings would not improve the living income gap”. She mentioned that “the service provision piece is important, access to finance, access to inputs, availability of labour” (ibid.).

Abdulahi Aliyu (personal communication, August 11, 2022) noticed that “farmer trainings and all those things do not really yield the needed results. And the resources that is pumped into this is quite huge”. He mentioned, the low “adoption amongst farmers [that is] quite difficult” (ibid.). Also, Bo van Elzakker (personal communication, August 4, 2022) talked about they “are struggling already for 30 years into motivating the farmer to do things better” when they “train or make a farmer aware or convince the farmer to change his practises”. He also mentioned that “the acceptance of the farmers to continue to do good and better agricultural practises is really a mysterious point” (ibid.).

As Daniël Otu (personal communication, August 11, 2022) put it “farmers are sometimes not susceptible to change”. To address these concerns with the uptake of training material, Bo van Elzakker (personal communication, August 4, 2022) argued that it is needed to work “with local coaches and then [the farmer] gets into a working rhythm” and it is needed “to coach the farmer continuously”. Also, Abdulahi Aliyu (personal communication, August 11, 2022) emphasised that “you need them to be able to continue on their own without necessarily calling on [someone] to come back”.

Rupert Day (personal communication, August 10, 2022) also emphasized the need for “more individualised level of support” and he emphasized that “generic training programme does not really cover it or at least there is more that can be done”. Cargill provides this through 1-to-1 coaching “looking at what improvement opportunities there are and putting together a farm development plan”

(ibid.). Misses van Roekel (personal communication, August 12, 2022) stressed the importance of “leav[ing] that ownership at community level”. She mentioned that “it is good to provide the tools and the training, and then communities can pick it up themselves and develop it further” (ibid.).

It was considered important to make sure women also have access to trainings. Hammond Mensah (personal communication, August 2, 2022) mentioned that “because a woman also does other activities like taking care of the children, and cleaning and washing and cooking and things like that. Usually, they do not have enough time to participate in training programmes”.

An opportunity identified by Daniel Otu (personal communication, August 11, 2022) is to harmonise training opportunities more as he recognised that many different organisations provide their own training. If “those are all joined together, so that we do not spend a lot of time giving the farmers different kind of information at different times and then they get confused” (ibid.). Coordination is needed for this. Michael Amoah (personal communication, August 16, 2022) mentioned that Cocobod is already trying to find the right training programmes and “mainstream them into our extension programme”.

The effects of farmer training arguably have been limited since farmers are not that susceptible to change. Personal coaching rather than generic programmes can provide a solution. A long-term strategy is needed to make sure the farmers can continue their newly learned practices. Furthermore, women should be included in training programmes, as they sometimes do not have the capabilities to attend. Lastly, it was suggested to collaborate amongst stakeholders in the sector to make sure the training is aligned to avoid confusion and save money.

4.2.4.3 Farmer organisation

Cooperatives can bring all kinds of benefits (Oomes et al., 2016) that can contribute to closing the living income gap for smallholder cocoa farmers. Gaël Lescornec (personal communication, July 29, 2022) stated that the cooperatives are “the ones who provide all the access to services and products that farmers need to be profitable”. However, Han Brouwers (personal communication, July 27, 2022) stated that these cooperatives are “really in the traditional cooperative model. [...] It is very difficult to actually follow up on these types of activities, such as an access to finance project, for example”.

Only a small part of Ghanaian cocoa farmers is part of a cooperative (Bymolt et al., 2018). Rupert Day (personal communication, August 10, 2022) said that Cargill “see[s] cooperatives and farmer organisations as a very positive thing in terms of our ability to deliver services, but also their ability to deliver services to members, and also inform us on what services might be most relevant to them”. Michael Amoah (personal communication, August 16, 2022) looked at cooperatives “as a way of sharing best practices, and as a way of learning from each other and to improve on their productivity

and practises". Multiple initiatives are working to strengthen cocoa cooperatives in Ghana. Also, they often implement interventions through cooperatives.

Michael Amoah (ibid.) emphasised that "cooperatives are self-select". However, "they need a lot of support in terms of capacity building to be able to build effective governance structures". "The only thing the government can do" according to him "is promote it" (ibid.). One thing that is important in this is to have clear procedures when working with a cooperative, so they are incentivised to follow the guidelines (J. Claas, personal communication, August 10, 2022).

To strengthen the cooperatives some methods were proposed by the interviewees. Joost Claas (ibid.) stated that Tony's Chocology is "hav[ing] a real partnership with the cooperative instead of it being a kind of annual audit where we say what a cooperative is not doing well or is doing well". He emphasized that "a cooperative is a company, it has to take responsibility for itself". This is in line with the research of Dalberg and Wageningen University (2018), which emphasised the importance of a long-term relationship with farmer organisations for the effective implementation of interventions.

Mister Kwapong-Akuffo (personal communication, August 1, 2022) agreed with this and said that a "cooperative is actually a business and functions as a business" so that "they can have the same benefits and opportunities as a regular business". According to Joost Claas (personal communication, August 10, 2022), this can be done "by being critical and by working well with the cooperative" instead of "simply [...] giving money and checking something every year". Jack Steijn (personal communication, July 29, 2022) emphasised that it is important to enhance "the development of their farmer's professionalisation".

Reaching all farmers with the interventions can be hard. Mister Kwapong-Akuffo (personal communication, August 1, 2022) pointed out that some farmers are more organised than others and to close the living income gap "in the long-run it makes more sense for a balanced development to integrate specifically the marginalised groups instead of leaving them behind". Michael Amoah (personal communication, August 16, 2022) stated that "most of them are not mature to a level where we have to pass on the basic rules of cooperative. [...] It is a new trend that is catching up". The fact that some farmers and farmer organisations are less developed than others should not be seen as the fault of the farmer according to Han Brouwers (personal communication, July 27, 2022) "because they do not have the possibilities".

Cooperatives are often used as a gateway to implement interventions. Furthermore, they can provide access to services and finance. However, not many farmers are part of a cooperative or their cooperative is not that well organised. It was argued that this should be supported by the government but also by the other stakeholders. For cooperatives to be successful, they should be functioning as a

business and worked with professionally through long-term partnerships. Furthermore, it needs to be overseen that also more marginalised farmers can be part of a farmer organisation and receive the benefits.

4.2.4.4 Strengthening communities

Community and capacity building is another aspect considered important to close the living income gap. Misses van Roekel (personal communication, August 12, 2022) mentioned that “the moment a community is passive, fewer things take place there”. Therefore, she argued that it is important “to really leave that ownership at community level” (ibid.). In this way “communities can pick [activities] up themselves and develop it further” (ibid.). This process “has to do with leadership at the local level” (ibid.).

Bo van Elzaker (personal communication, August 4, 2022) emphasised that currently, many initiatives use “old fashioned” interventions rather than “in the community, really engaging the farmers”. He suggested working more “with the farmers” over “selling things” (ibid.). While Han Brouwers (personal communication, July 27, 2022) recognised that “community building is crucial”, he mentioned that it is important to keep in mind that all farmers are organised differently. This can be for example tribal, regionally or in cooperatives. Daniel Otu (personal communication, August 11, 2022) declared that “to be able to help develop the communities, then we have to join forces”. This is needed to also be able to reach more marginalised groups according to Mister Kwapong-Akuffo (personal communication, August 1, 2022).

Moving from the straightforward implementation of interventions, community building can be a way to engage with farmers to a long-term strategy to earn a living income. Leaving ownership and really engaging them is important for that. However, collaboration is needed to do this and reach all farmers in Ghana.

4.2.5 Role of the government

Governments play a key role in the living income challenge (Kolavalli & Vigneri, 2017). Joost Claas (personal communication, August 10, 2022) emphasised that legislation is needed to change the sector. A distinction was made between the Ghanaian government and the buying governments. As most interviews were held with European-based companies, most insights regarding the buying government refer to the European Union (EU). However, more countries fall in the category of buying government.

Throughout the previous sections, the role of the government has already been discussed from the lens of specific interventions. Here, some additional insights are provided that were not covered until now.

4.2.5.1 Ghanaian government

“Living income is a national issue” according to Gaël Lescornec (personal communication, July 29, 2022). She argued that “it is in [the Ghanaian government’s] mandate” to “set the enabling environment” for smallholder cocoa farmers to earn a living income (ibid.). Rupert Day (personal communication, August 10, 2022) described that the origin government should both take a regulative and facilitative role to closing the living income gap.

Regarding regulation, Rupert Day (ibid.) mentioned that the industry “really rel[ies] on governments around helping us understand what their rural development planning plans are more broadly”. In that way, they can adapt their strategies to the national ones. In this way, questions like “what skills and capacity development activities do they need” will be answered so “that we can contribute to build a bit more of a resilient rural economy” (ibid.).

Problems were identified regarding land and tree ownership in Ghana. The government owns all trees and has the right to do with them what they want, stated Jack Steijn (personal communication, July 29, 2022). Hammond Mensah (personal communication, August 2, 2022) mentioned that this leads to low motivation to renew their trees as it poses a risk for the farmers. Land ownership is especially a challenge for women and youth (ibid.). With that, problems occur with access to investments and incentives to make long-term decisions (H. Brouwers, personal communication, July 27, 2022). To ensure long-term visions in the sector, the government should implement correct legislation (ibid.).

It was also argued that the government should have a facilitating role. Rupert Day (personal communication, August 10, 2022) argued that this is currently lacking. Han Brouwers (personal communication, July 27, 2022) seconded this by stating that the government should facilitate education, but also access to services and finance.

It is the role of the Ghanaian government to help smallholder cocoa farmers reach a living income. They should provide a clear rural development strategy, that also other stakeholders can use to adapt their interventions so that they align. Furthermore, the problems regarding tree and land ownership should be addressed. Besides regulation, the government should facilitate things like education, services and finance.

4.2.5.2 Buying government

As an opportunity, the upcoming EU due diligence law is mentioned. This law does not target the cocoa sector specifically but it does have implications. Mister Kwapong-Akuffo (personal communication, August 1, 2022) stated that these “regulations are an entry point to see, how the private sector could best align”. In the process of development of these laws, critiques raised regarding the involvement of stakeholders. The farmer organisations themselves were not involved enough according to Joost Claas

(personal communication, August 10, 2022). He reasoned that this was due to a lack of negotiation power. To solve this “the position of the farmers must be strengthened and that of the cooperative must be strengthened”. However, he also mentioned that “there are all sorts of mechanisms that make it difficult” (J. Claas, personal communication, August 10, 2022).

Hammond Mensah (personal communication, August 2, 2022) recognised this upcoming EU law as an opportunity but did state that “there is a need to include farmer poverty as well”. Furthermore, he argued that “producing countries also have to be supported in how to develop a national interpretation for the provisions under this act” (ibid.). Also, Michael Amoah (personal communication, August 16, 2022) showed critique as the new law “brings additional barriers for the farmer. And the farmer must invest to ensure they meet these requirements, who pays for their cost? Is a market prepared to pay for these costs? Then we have ensure to put in structures to meet these requirement. [...] For me this is a major issue”.

4.3 Stakeholder collaboration

Many interviewees mentioned the need for more collaboration in the sector. Collaboration is needed for smallholder cocoa farmers to reach a living income according to research of for example, Dalberg and Wageningen University (2018) and Waarts et al. (2021). Misses van Roekel (personal communication, August 12, 2022) stated that “everyone has a role to play”. Gaël Lescornec (personal communication, July 27, 2022) emphasised that “it is really looking at that whole entirety and not just putting the onus on farmers and are the farmers just going to get what they need to have better cocoa”.

Working together can be challenging. Misses van Roekel (personal communication, August 12, 2022) stated that “the cocoa sector is actually a relatively small sector. [...] So there is a lot of competition. And that is not always to the advantage of working together”. Daniel Otu (personal communication, August 11, 2022) stated that “currently the cocoa sector is almost like everyone for himself, people are trying to do their own thing. So this makes it a bit difficult to do this coordination”.

Bo van Elzaker (personal communication, August 4, 2022) also recognised “the lack of cooperation”, but stated there is an “abundance of competition between the cocoa companies. They would rather fight themselves to death than cooperate”. He observed that the Cocobod and cocoa companies “are the two most important in the obstruction. Quite high up there. Because I do think that everything ‘below’, including the farmers, are quite willing to cooperate or whatever” (ibid.).

“Consensus on a clear path forward” is currently missing in the cocoa sector according to Rupert Day (personal communication, August 10, 2022). Furthermore, he argued that “the challenge [...] is that we're all still testing what could potentially work” (ibid.). Jack Steijn (personal communication, July 29,

2022) pointed out that “everybody is more or less walking in the same direction but some people want to walk faster than others. And that is the only thing. So I do not think there is a lot of discussions about differences of opinion or even opposite interests”.

Regarding knowledge sharing, Rupert Day (personal communication, August 10, 2022) mentioned that information sharing within the cocoa industry could happen more, “not only for our own learning, but also for learning from the industry in general [...]”. He argued that that can help to answer questions like “what are the lessons from this small programme and what can be taken into our broader approach?”. Hammond Mensah (personal communication, August 2, 2022) and Han Brouwers (personal communication, July 27) mentioned that it would be helpful to share datasets amongst different initiatives. One initiative starting up a project in a certain area should “collect a standard dataset [...] and use that as a basis for the interventions and the projects” and “if there is another organisation [...] then the data is there” (ibid.).

Misses van Roekel (personal communication, August 12, 2022) declared that solving problems regarding the living income gap is “not a static thing, so it is a learning process for everyone”. She recognised the sharing of information regarding projects and programmes as “potentially a very nice initiative to improve income” that leads to “getting new initiatives that can contribute to [the living income challenge]” (ibid.).

Michael Amoah (personal communication, August 16, 2022) mentioned that Cocobod is “learn[ing] lessons” from their programmes and translating “back the lessons into the policy to finetune it”. However, they are also interested “to learn some lessons from what the private sector is doing”. They “see them as pilot programmes” and “once they are successful, we will promote it amongst” (ibid.). However, mister Kwapong-Akuffo (personal communication, August 1, 2022) stated that “there has to be a larger discussion as to how long should this pilot continue and at what point would there be solid, long term programmes that would, in the long run, be beneficial to the farmers and not just a hit and run approach”.

Gaël Lescornec argued that “it is absolutely critical that there is a coordinated approach and that people are speaking the same language and see where they fit in those solutions.” Also, she emphasised the importance of “aligning different interests and aligning different approaches” (ibid.). However, she recognised that we are “at a unique crossroads right now between government and industry, because there is just so many different platforms and initiatives to have those dialogues” (ibid.).

A proposed way to have these dialogues is through platforms. Gaël Lescornec (ibid.) emphasised the need for “a trusted platform where you have a safe space to be able to negotiate and compromise for

the sake of having a sustainable supply chain in the future". Rupert Day (personal communication, August 10, 2022) stated that platforms are "needed to really drive change in the sector". He also acknowledged that these platforms are "playing vital role and also trying to bring the origin governments to the table and to have those conversations" (ibid.). Mister Kwapong-Akffo (personal communication, August 1, 2022) emphasised that: "it is important that – besides the public and the private sector – the farmers and the civil society are adequately represented in those discussions".

Gaël Lescornec (personal communication, July 29, 2022) emphasised the need "to get some kind of a collective agreement [...] and also to compromise a bit". She said that "too much of the costs and risks are at the level of the farmers. Not at the level of the companies or the government". Therefore, "a combination of interventions" is needed (ibid.). This is in line with statements of Fountain & Huetz-Adams (2020) about the lack of a sector-wide commitment.

Collaboration amongst the different stakeholders is needed as currently there is arguably still too much competition, especially in the private sector. A lack of a clear path leading to all smallholder cocoa farmers earning a living income is missing. To reach that, the stakeholders should share insights and learn from each other. Trusted platforms are needed for this knowledge sharing, but also for dialogue. Everyone should be invited to the table, also farmers to enhance their negotiation power. Part of the responsibility should be taken away from the farmers.

4.4 The role of research

Research specifically on living income is still limited. Misses van Roekel (personal communication, August 12, 2022) stated that "there just has not been a lot of research into what exactly the impact of activities is on living income, or at least not on a large scale". She stated that "we do not have specific data or results on what exactly the impact is in a quantitative way. We do have a lot, more in the form of farmer stories or just experiences, that we hear" (ibid.). She stressed the need for quantitative research as they "often hear these positive stories, but you do not always hear the stories that are perhaps less positive. Or people who have benefited less" (ibid.). Questions like "who benefits most. And how can you best reach the people or the farmer who is most in need" are still unanswered (ibid.).

The importance of data is acknowledged by multiple stakeholders. Han Brouwers (personal communication, July 27, 2022) said that "if we work in a much more data-driven way, we will get much further, processes will become much more efficient, and farmers will benefit much more from that". And Rupert Day (personal communication, August 10, 2022) stated that "we need to make sure that our recommendations are based on proper research".

Marten van Gils (personal communication, August 2, 2022) emphasised that “you need information and data about the first mile, about the farmer. And who is going to provide that data? Ultimately, it is the farmer”. To get proper data, a link to the farmer is needed. Rupert Day (personal communication, August 10, 2022) mentioned that as the industry “our strength is our data collection around cocoa”. However, he considered it still challenging how to analyse this data properly to address the living income challenge. Furthermore, it was suggested to fund research projects with multiple stakeholders in the sector (ibid.).

The definitions and calculations around living income are still debated (Fountain & Huetz-Adams, 2020; Tyszler et al., 2019; Van de Ven et al., 2021). Rupert Day (personal communication, August 10, 2022) stated that “we do not have that stage of the calculation really clearly defined” and he argued that therefore, “no one is really clear” on what needs to be done to close the living income gap for smallholder cocoa farmers in Ghana. Michael Amoah (personal communication, August 16, 2022) declared that living income cannot be calculated in a generalised manner, as there is no finite answer as to how it should be calculated. Bo van Elzakker (personal communication, August 4, 2022) criticized the methodology around living income. He noticed that there are many, mostly aged, smallholder cocoa farmers that do not care about reaching a living income. He stated that “they are happy with it. They wonder, what are you going on about, this living income. I do not want to take any risks”.

Furthermore, Bo van Elzakker (ibid.) criticized the research that has already been done. He argued that much research that has been done is not including all farmers, but is focussed on “these farmers [that] are often the low hanging fruit” and “the farmers that are part of their project, not the whole community”. These farmers are easily accessible to work with and conduct research on. In his opinion, this does not give the right outcomes and in that sketches a different image than reality (ibid.). According to research conducted by Agro Eco LBI “[the impact] was limited” of most interventions (ibid.).

Another critique on research is that currently the “segmentation of farmers for research [is] not being implemented at scale” but should be according to Rupert Day (personal communication, August 10, 2022). He argued that “you need very specific data and information about each individual farmer to be able to model it or to suggest the impact of certain interventions on their household income” (ibid.). Gaël Lescornec (personal communication, July 29, 2022) also recognised this as she sees “a danger or risk in categorising farmers [...] because the fact is that they need to identify the different opportunities [...] and us trying to categorise and only investing in one commodity is a little bit risky”.

More large-scale research is needed on the effectiveness of interventions to close the living income gap for smallholder cocoa farmers in Ghana. When funded by multiple stakeholders, this is argued to

be possible. In this way, data-driven recommendations can be made that lead to the effective implementation of interventions that likely benefit the farmers more. The farmers need to be involved to generate relevant data. Furthermore, as living income is a relatively new concept, the terminology and methodology are still debated. It is suggested to properly segment farmer groups when researching them as this likely increases the relevance on a household level. Critical reflection is needed on whether the older farmers also need to reach the living income benchmark for a decent living.

Chapter 5: Reflection on opportunities and challenges for the cocoa sector

The results were translated into opportunities and challenges using the food systems approach. They are presented in this chapter. In this way, contextual insights are provided stemming from the initiatives regarding their practices aiming to close the living income gap for smallholder cocoa farmers in Ghana. These insights are compared to the literature discussed in chapter 2. These insights can be valuable for all stakeholders in the cocoa sector working to close the living income gap for farmers. Furthermore, suggestions for future research are made.

5.1 Food systems framework

The main opportunities and challenges identified per sector activity are presented in table 2. They are the main insights taken from the interviews, analysed using the integrated food systems framework of Borman et al. (2022). As argued by Dalberg and Wageningen University (2018), a combination of interventions is needed to close the living income gap for smallholder cocoa farmers in Ghana. This was also argued by the stakeholders. An integrated, holistic approach should be taken, also concerning the insights provided in this thesis.

5.1.1 Production

Productivity-enhancing interventions target the sector activity production and are most debated in literature as an intervention to close the living income gap. However, no one-size-fits-all solution exists, suitable to increase yields for all farmers. Farmers consist of a diverse group (Bymolt et al., 2018), and appropriate approaches are needed when implementing interventions that target productivity. Furthermore, the initiatives are struggling with changing the practices of the farmers. Trainings are often provided but do not show long-term changes in practices. Furthermore, the ageing farmer population is considered a serious problem regarding productivity (Abdulai et al., 2020). It is recognised that properly educated people, especially youth, can perform activities on the farm that the older farmers are not able to do.

Sustainable intensification was argued by Vanlauwe et al. (2014) and multiple stakeholders to increase yields. Again, training can be used to educate farmers on how to implement sustainable practices on their farms. Strategies like agroforestry were discussed, but can be challenging as the Ghanaian government owns the trees, which causes a lack of motivation for the farmers to renew their fields.

Crop diversification and the commercialisation of more parts of the cocoa bean are seen as opportunities that can be explored more. However, it is argued that it can be risky to move farmers away from cocoa, as it is an almost sure market. The challenge is to find diversification activities that suit the context of the farmer and leave ownership to them to ensure motivation to farm. Attipoe et

al. (2021) argued that motivation for cocoa farming might decrease when farmers participate in income diversification activities.

More research is needed on the effect of sustainable productivity and diversification interventions on living income, where farmers are segmented properly. Currently, both the literature and initiatives do not agree on the most effective way.

Table 2 - Opportunities and challenges per sector activity

Sector activity	Opportunities	Challenges
Production	<ul style="list-style-type: none"> - Promoting sustainable intensification - Youth employment - Diversification 	<ul style="list-style-type: none"> - No one-size-fits-all solution - Market access for diversification
Value chain development	<ul style="list-style-type: none"> - Innovative ideas, entrepreneurial skills farmer - Commercialise more of the cocoa bean - Fair ownership models - Redistribution of risk - Address pricing differently - Provide (long-term) contracts to farmers 	<ul style="list-style-type: none"> - Unclear distribution of power and responsibility among stakeholders - Keeping long-term approach in mind - Inclusion of youth and women
Service provision	<ul style="list-style-type: none"> - Educate youth to provide services - Service provision through cooperatives - Pre-financing or providing for free 	<ul style="list-style-type: none"> - Ageing farming population - Reach all farmers - Financing the services
Consumption	<ul style="list-style-type: none"> - Diversify to edible crops for household or local consumption 	<ul style="list-style-type: none"> - Small plots, unable to produce food and cocoa
Stakeholder organisation	<ul style="list-style-type: none"> - Support farmers to be part of a cooperative increasing their negotiation power, and enhancing access to finance and services - Leaving autonomy to the cooperative - Use existing structures to bring other things than the cocoa sector (Cargill) - Cooperation in the sector to strengthen farmer communities 	<ul style="list-style-type: none"> - Not all farmers are willing or able to organise (in cooperatives) - Farmers' willingness to change - Motivating farmers to self-organise - Inclusion of women and youth - Cooperation needed to strengthen cooperatives
Regulation	<ul style="list-style-type: none"> - EU due diligence law, if properly implemented and guided - Stimulate new, innovative projects - Traceability enhancing - Enhancing succession - One clear view from the government that other stakeholders can follow 	<ul style="list-style-type: none"> - Implementation costs new laws - No one-size-fits-all solution
Investment	<ul style="list-style-type: none"> - VSLAs - Platform providing all information needed for financial institutions - Long-term contracts 	<ul style="list-style-type: none"> - Risk for financial institutions to invest in cocoa farms - Lack of motivation to invest in farm
Coordination	<ul style="list-style-type: none"> - Trusted platform development for dialogue - Key roles government and private industry - Harmonised farmer approach - Large-scale research projects funded by multiple stakeholders - Aligning data systems 	<ul style="list-style-type: none"> - Harmonise data-collection and data-sharing methods - Including farmers in discussions - Conflicting views on what the solution is in the sector - Long-term vision - Creating a shared vision for the sector

5.1.2 Value chain development

The cocoa sector emphasises the need for innovative, new ideas in the chain. Many suggestions were provided, such as the commercialisation of more parts of the cocoa bean, the use of fair ownership models and different approaches to pricing mechanisms. In general, it comes down to more value being assigned to the farmer and less risk. This is in line with the argumentation of Fountain & Huetz-Adams (2020) in the Cocoa Barometer but is not something that has been discussed in literature yet.

A long-term approach is needed in all decision-making and implementation regarding interventions, for value chain development to be successful. This is considered a challenge, as it can be easier to stick to a short-term vision. Furthermore, it is not clear in the sector where the power and responsibility exactly are. It is important, which is also argued by Waarts and Kiewisch (2021), for all stakeholders to take responsibility and work together to create a more fair distribution of value and risk along the chain. Again, the fact that generalising interventions for all farmers can be tricky as not all smallholder cocoa farmers are the same (Bymolt et al., 2018).

5.1.3 Service provision

Access to services is considered of high importance for smallholder farmers to reach a living income (Attipoe et al., 2021). It increases their productivity as well as increase their negotiation power in the sector. The education of youth to provide these services is seen as a major opportunity, mostly regarding productivity-enhancing practices which was also argued by Unnikrishnan et al. (2022). Financing services can be challenging for smallholder farmers (Dawuni et al., 2021), as they are often stuck in the poverty trap (van Vliet et al., 2021). Proposed solutions are, providing the services upfront and paying after harvest, or providing the services for free. However, giving things to farmers for free was a highly debated intervention amongst the stakeholders, which should come with some regulation.

Another challenge reaching all farmers when implementing interventions aiming to provide services. Using existing structures of Cocobod could be the solution, which will also harmonise the interventions. Cooperatives could also be leveraged to provide services. Oomes et al. (2016) also argued cooperatives are beneficial for that. However, most farmers are not part of a cooperative (Bymolt et al., 2018) and Bernstein et al. (2019) stated that they were not that effective in raising the income of the rural poor.

5.1.4 Consumption

The ability to have a nutritious diet is part of living income (LICoP, n.d.). Cocoa is not consumed by farmers themselves, as it is not a nutritious crop. However, cocoa farmers could diversify into crops that provide nutritious food for themselves and their community, which was also proposed by Bymolt et al. (2018). Challenges regarding market access that come with crop diversification are in this way

also addressed. Furthermore, the farmers will need less money for buying food. However, the plots of the farmers are often too small to grow edible crops. Small plot sizes are in general considered an issue to close the living income gap for smallholder cocoa farmers in Ghana (Waarts et al., 2021).

5.1.5 Stakeholder organisation

Cooperatives are considered the most important form of stakeholder organisation to address the living income challenge. Currently, Ghana does not have a strong cooperative system, and not many farmers are part of a cooperative (Bymolt et al., 2018). Cooperatives are considered an opportunity for multiple reasons. They enhance the negotiation power of the farmers and provide access to services, education and finance, which was also argued by Oomes et al. (2016). To strengthen cooperatives they should be worked with closely by the industry and other stakeholders, Dalberg and Wageningen University (2018) argued that this needs to happen through long-term relationships. To empower the local communities, it is considered best if they have autonomy over, for example, their data and implementation of practices. The other stakeholders should have a supporting role rather than taking over the governance structures of the cooperatives.

The research of Bernstein et al. (2019) already argued that strengthening organisations does not have a positive impact on income. The stakeholders also argued the effectiveness of cooperatives is obstructed by some challenges. Forming cooperatives is a self-organising activity that needs frontrunners. The motivation to form and keep cooperatives has to come from a local level. Motivating all farmers to participate is considered a challenge.

Besides the organisation of farmers, an opportunity lies in the organisation of the whole cocoa sector. Aligning interests to provide a holistic, multi-stakeholder solution to the issues causing the living income gap for smallholder cocoa farmers. Also, lessons learnt can be shared through a proper organisation as well as the creation of data tools that are interoperable. In this way, new projects and programmes can be implemented faster and are argued to be more effective.

5.1.6 Regulation

Legislation can drive change in the sector. The industry is asking for clear nationwide guidelines on how they see the living income challenge should be addressed. In that way, they can implement interventions that follow this vision. Regulation can be an opportunity to stimulate new, innovative projects and ideas. Furthermore, it can address issues like small plot sizes, old age, and succession. However, it is considered a challenge to implement legislation that can effectively target all farmers.

A major opportunity is considered the upcoming EU due diligence law. However, in the decision-making of this law, all stakeholders should be involved properly through dialogue and platforms. The negotiation power of Ghana, but also the farmers themselves is considered too low.

5.1.7 Investment

The ability to invest is important in reaching a living income as investments are needed to implement the right practices (van Vliet et al., 2021; Waarts & Kiewisch, 2021). Also, investments are a way to escape the poverty trap (van Vliet et al., 2021; Wessel & Quist-Wessel, 2015). However, many smallholder farmers currently do not have sufficient access to credits (Dawuni et al., 2021). To provide access to finance, VSLAs are considered an opportunity. VSLAs strengthen local communities and empower them to work together. Also, the risk for financial institutions decreases through this method. Another opportunity is the development of a platform where all data that financial institutions need come together. Cocobod is currently working on such a platform. This platform can also serve a multitude of different purposes as data alignment is needed for more interventions that provide access to finance.

5.1.8 Coordination

The need for proper collaboration has been mentioned throughout all interventions in chapter 4, as well as the sector activities discussed before. Many opportunities lay in this area that will also likely have a positive effect on the other activities in the food system. Research like Dalberg and Wageningen University (2018) Waarts and Kiewisch (2021) also emphasised the need for collaboration in the cocoa sector to close the living income gap for smallholder farmers.

The main opportunity identified, is the creation of a trusted platform where dialogues can be held to align the interests and activities in the sector. All stakeholders should be included here, also the farmers. Their negotiation power should be improved, according to the stakeholders. In this way, a shared vision for the future of the cocoa sector in Ghana can be created, which is currently lacking. When this is properly introduced things like training opportunities for the farmers, data systems and research can be aligned. In this way, they will arguably be more effective and less resource intensive.

For coordination, the government is considered the most important, as some argue they have the most power. They can provide a clear long-term vision of what needs to happen in the cocoa sector to reach a living income for smallholder cocoa farmers. However, it was also argued that the private sector needs to take responsibility as they play a key role in the cocoa sector and enabling smallholder cocoa farmers to earn a living income.

5.2 Research opportunities

As this research is quite explorative in nature, logically certain questions are unanswered or need more in-depth analysis and further research. First of all, certification schemes and farmer organisations were not interviewed due to time limitations. From the research stems that farmer organisations play an important role in providing services and increasing the negotiation power of the farmers. It would be valuable to include their perspective to the issue of closing the living income gap.

Besides that, there is still uncertainty about the distribution of power in the value chain. Also, the price-setting mechanism is ambiguous, making it hard to influence it and to assign responsibility. Price has a major influence on the income of smallholder cocoa farmers, and therefore more research on this topic would be relevant.

Furthermore, many themes identified in the interviews were not yet discussed in literature in the context of living income. For example, VSLAs, the EU due diligence law, and the role of data did not come forward in the literature review. Following the insights of this thesis, they should be researched in the context of the living income challenge for smallholder cocoa farmers in Ghana to explore their effectiveness. It is recommended to combine quantitative and qualitative research methods to provide holistic, actionable research.

From the interviews, it was concluded that it can be beneficial to look at smallholder cocoa farmers not just as cocoa farmers, but as members of a local community. Within the integrated food systems framework it was not possible to do this. In future research, it would be valuable to research the topic of living income through a landscape lens rather than a food system lens.

Chapter 6: Recommendations on how to close the living income gap for Ghanaian smallholder cocoa farmers

The main research question of this thesis is: *'What insights into how to close the living income gap for smallholder cocoa farmers in Ghana can be obtained from analysing current initiatives?'*. This concluding chapter answers this research question and translates these findings into takeaways for stakeholders in the cocoa sector.

Many smallholder cocoa farmers in Ghana live in poverty and do not reach a living income. Research on how to close this living income gap is limited and no consensus is present in the sector on what needs to be done. Although living income is broadly implemented goal in the sector, the effectiveness of interventions has not been studied extensively. It has been acknowledged that a multi-stakeholder and holistic approach is needed to solve the problem. Therefore, this thesis analysed insights from stakeholders into how to close the living income gap for smallholder cocoa farmers in Ghana and compared them to literature. Based on the analysis, the following recommendations are made to stakeholders in the Ghanaian cocoa sector.

Proper, large-scale research is needed to identify the right set of interventions to close the living income gap. No consensus has been reached on the effectiveness of interventions both in academics and the sector. When conducting research, all cocoa farmers should be represented. Collaboration in the sector is needed to generate data from a representative sample size adequately representing all different farmer groups but also to fund research. Since smallholder cocoa farmers in Ghana are diverse, proper segmentation is needed to identify the right, customised interventions for different farmers. It is important to acknowledge that there will not be a one-size-fits-all solution.

Furthermore, **sharing knowledge** within the sector will help identify the most effective interventions to close the living income gap for smallholder cocoa farmers in Ghana. The lessons learnt from programmes and projects that are already out there are crucial. Willingness to share seems to be there, however, a trusted platform to do this is still in development. Through proper platform development, dialogues can be held to create a shared vision for the sector.

Smallholder farmers themselves are sometimes marginalised and can be hard to reach with interventions. Also, they can lack the motivation to change their practices. Furthermore, they have low negotiation power and are often excluded from the decision-making process. Therefore, a focus on the **empowerment of farmers** should be a part of the solution. Interventions should have a clear, long-term vision. They target access to essential matters to reach a living income like finance and services.

In the end, everything comes down to **collaboration**. Collaboration can be considered the key factor in closing the living income gap for smallholder cocoa farmers in Ghana. For this, all stakeholders need

to come together and especially the farmers themselves should play an important role. The need for new, innovative ideas is big as it has shown that old-fashioned interventions do not have the effects that are needed. Although new platforms and initiatives are coming up, the need for a more inclusive approach is seen in the sector.

These recommendations can be used by stakeholders in the cocoa sector with the ambition to close the living income gap for smallholder cocoa farmers. The insights are not exhaustive and further research is needed to verify claims. However, they can be taken as a starting point.

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Appendices

Appendix 1 – Food System Framework definitions of sector activities

Activity	Definition	Attributes
Production	Information pertaining to the farm or basic production unit, including what is produced and how	Farming system's viability, social inclusion, and resilience for a specific segment of the market
Value chain development	Details about market linkages like storage, trade, transport, processing, distribution and retail	Efficiency, transparency, traceability and fairness of trading practices, and dis/incentives for good practices
Service provision	Delivery models of services to stakeholders in the chain (e.g., labour, advice, agro-inputs, machinery, transport, finance)	Quality, feasibility and differentiation of service provision, and inclusiveness
Consumption	Promotion and utilization of products, and management of waste arising therefrom, occurring at different proximities to the farm and levels of value addition	Consumer preferences, customs, knowledge, and behaviours in determining the suitability of products to their needs
Stakeholder organisation	Organizations around producers (e.g., cooperatives, federations); value chains (e.g., partnerships and procurement); traders (e.g., markets); and services (e.g., service centres)	Effectiveness and inclusiveness of organizing stakeholders to improve their access to inputs, services and markets; empower individuals; and increase their collective agency
Regulation	Rules, systems and procedures governing the sector, including market management, policies, laws, regulations and directives; and informal norms, customs and power dynamics, including the way these structure the operations of stakeholders and their organizations	The implementation of policies and law enforcement; the coherence of regulations with stakeholder norms, customs and practices; the compliance of practices with regulations; and the effectiveness of regulations in achieving policy objectives
Coordination	Details about sector strategic frameworks (e.g., sector plans and roadmaps) and forums (e.g., sector platforms and governing agencies/boards), and codes of conduct (e.g., sector compacts)	Quality of dialogue and alignment of stakeholders operating at different levels around a shared vision, strategy, standards and guidelines, in sector-wide monitoring and learning, and for advocacy
Investment	Mechanisms of the fiscus or non-state bodies to collect revenue (e.g., taxes, duties, levies and fees), reinvest it in the sector (e.g., subsidies and funds), and pull additional private and public investments	Ability to capture a share of the value created by the sector and make strategic pre-competitive investments in research, education, development, regulation and governance, complemented with the attractiveness for investment by private sector, financial institutions and donors

Appendix 2 - Overview interviewed initiatives

Type of initiative	Organisation	Interviewee	Function interviewee	What the organisation does – quoted from website
Governmental	Cocobod	Michael Amoah	Director of research and development	“The mission of the Board is to encourage and facilitate the production, processing and marketing of good quality cocoa, coffee and sheanut in all forms in the most efficient and cost effective manner” (Cocobod, n.d.).
	Tony’s Chokolonely	Joost Claas	Open chain acquisition manager	“Our vision: 100% slave-free chocolate. Not just our chocolate, but all chocolate worldwide. [...] We will accomplish it with the help of Tony’s roadmap. Our roadmap has 3 pillars” (Tony’s Chokolonely, n.d.-b). “By following Tony’s Sourcing Principles for slave-free cocoa, it’s possible to make slave-free chocolate and be commercially successful” (Tony’s Chokolonely, n.d.-b).
Individual corporate initiatives	Cargill Cocoa and Chocolate	Rupert Day	Farm livelihood advisor	“We connect farmers with markets so you can prosper. We connect customers with ingredients to make meals people love. And we connect families with daily essentials — from the foods you eat to the floors you walk on” (Cargill, n.d.-a). “We are here to sustainably provide high quality cocoa and chocolate throughout the world, bringing our customers peace of mind, integrity and excitement” (Cargill, n.d.-b).
	Beyond Beans Foundation	Misses van Roekel	Project Manager Sustainability Ghana	The Beyond Beans Foundation is fully dedicated to developing and implementing projects across ETG’s (Export Trading Group) commodity supply chains in collaboration with partner companies, NGOs and government agencies. [...] At Beyond Beans we believe that the world of today has the knowledge, people, and tools in place to build profitable and self-sustaining communities, where farming is regarded as a respected profession and sustainable entrepreneurship is the norm. Beyond Beans aims to be a catalyst in achieving this vision, by connecting the right stakeholders and introducing innovative solutions from other sectors to agricultural supply chains” (Beyond Beans Foundation, n.d.).
	Koa Impact Ghana Ltd	Daniel Otu	Director of production and operations	“At Koa, we spot the hidden potential to empower people. We discovered that the cocoa fruit has much to offer besides the beans. The fruit lets us increase farmers’ income, create new jobs in rural areas and is a resource for added value for the people and planet” (KOA Impact, n.d.).
Platforms, networks and associations	IDH – The International Trade Initiative	Gaël Lescornec	Program manager cocoa and living income	“IDH helps companies and governments reach these goals by facilitating cooperation, innovating scalable solutions and embedding these practices into the market. Through programs like the Cocoa & Forests Initiative, Beyond Chocolate, the Farm and Cooperative Investment Program and Cocoa Origin, IDH aligns groups of stakeholders around a way forward and creates the conditions necessary for their success” (IDH, n.d.).

Platforms, networks and associations	Equipoise	Jack Steijn	Director/owner	“Equipoise works on market-related sustainability projects. The European market for cocoa products is developing fast. Requirements in the field of quality and sustainability become more and more stringent. Equipoise helps cocoa exporting countries as well as stakeholders in the cocoa supply chain in these countries to anticipate on these requirements and optimise their market strategies” (Equipoise, n.d.).
	Fairfood	Marten van Gils	Tech director	“Fairfood accelerates the change towards a sustainable food system. We develop innovative solutions that enable businesses to improve their responsible business practices. Open and attainable solutions that are designed to democratise the world of food”(Fairfood, n.d.).
	GIZ	Mister Kwapong-Akuffo	Technical advisor	“As a service provider in the field of international cooperation for sustainable development and international education work, we are dedicated to shaping a future worth living around the world. We have over 50 years of experience in a wide variety of areas, including economic development and employment promotion, energy and the environment, and peace and security. [...] We work with businesses, civil society actors and research institutions, fostering successful interaction between development policy and other policy fields and areas of activity” (GIZ, n.d.).
	Agro Eco LBI	Bo van Elzakker	Director	“One of the main focus of Agro Eco is to improve on the livelihood of cocoa farmers in Ghana. For the past 15, we have worked together with other benevolent organization to introduce various forms of intervention to improve cocoa farming, make it sustainable and more profitable and attractive” (Agro Eco, n.d.).
	Rikolto International	Abdulahi Aliyu	Director, Cocoa and Coffee Programme	“A sustainable income for farmers and nutritious, affordable food for everyone. [...] We reach our goals by building bridges between smallholder farmer organisations, companies, authorities and other actors across rural and urban areas. Together, we create innovative ways of accessing, distributing and producing nutritious, quality food, so no one is left behind. Through our global network, we wish to inspire others to tackle with us the inter-related challenges of food insecurity, climate change, and economic inequality” (Rikolto International, n.d.).
NGO and CSO campaigns	Solidaridad	Han Brouwers	Program manager market development	“With almost 1000 staff, we work in over 40 countries worldwide to create fair and sustainable supply chains. Inspired by 50 years of solidarity with under-resourced producer communities, we enable farmers, miners and workers to earn a decent income, shape their own future, and produce in balance with nature” (Solidaridad, n.d.).
	Solidaridad West-Africa	Hammond Mensah	Regional cocoa programmes coordinator	

Interview protocol

Master's thesis Nina Zwart - closing the living income gap for smallholder cocoa farmers in Ghana

Overview of the research work

This thesis is part of the final stage of the master's programme 'Sustainability Science, Policy and Society' at Maastricht Sustainability Institute, Maastricht University. The thesis is supervised by Etienne Hoekstra (e.hoekstra@maastrichtuniversity.nl) and written under the Fair and Smart Data (FSD) project of Maastricht University. More information can be found at <https://www.maastrichtuniversity.nl/fsd>.

Objective of the thesis

This thesis aims to answer the research question: *"What insights can be gained from practical examples regarding closing the living income gap of smallholder cocoa farmers in Ghana?"*. The research will compare different initiatives to find patterns in barriers and opportunities that are encountered. These are compared to recent related literature. In this way, insights can be gathered useful for different types of initiatives in the sector.

Research:

- Method: Semi-structured interviews based on the framework of questions presented below.
- Expected interview duration: Approximately 1 hour
- Location: remotely (Microsoft Teams)

Confidentiality

Before the information provided in the interviews is used, the interviewees' approval will be sought for the collected data. For this, a consent form will be signed. This document is sent in a separate document. Please return this document in pdf form, preferably before the interview takes place.

The interview will be recorded upon approval of the interviewee. After that, they will be transcribed. The transcribed texts of the interview can be sent to the interviewee for approval on request.

The outcomes of the interview will be used for the master's thesis of Nina Zwart. The report will most likely be made public through the website of the Fair and Smart Data project. Furthermore, it is possibly available to students' part of the master's program in the future.

Interview questions

General questions

- Which stakeholder(s) are most important when tackling the living income challenge, and why?
- What is the relationship between your organisation and smallholder cocoa farmers in Ghana exactly? How are they incorporated by the initiative (direct/indirect)? Do you have direct contact with them?

Question about the impact of the initiative

- What does your initiative exactly do to close the living income gap of cocoa by smallholder cocoa farmers in Ghana?
- What are the implications of this intervention/these interventions?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Questions related to sector activities

For my thesis, I have divided activities that can impact the income of the smallholder cocoa farmers in Ghana in eight categories:

1. Production
2. Value chain development
3. Service Provision
4. Consumption
5. Stakeholder organisation
6. Regulation
7. Coordination
8. Investment

- Which of these sector activities is your organisation targeting?
- Are there any aspects missing?

Only questions related to targeted sector activities will be asked. If questions have already been answered before, they will be skipped.

Questions related to *production*

- What does the initiative do, regarding closing the living income gap, to target the production of cocoa by smallholder cocoa farmers in Ghana specifically? Think about:
 - productivity
 - (Accessibility to) inputs and labour
 - quality of beans
 - ability to deal with unexpected (weather) events
 - etc.
- What are the implications of this intervention?
- What challenges and risks are encountered?

- Which opportunities can you identify?

Questions related to value chain development

- What does the initiative do, regarding closing the living income gap for smallholder cocoa farmers in Ghana, to target the value chain of cocoa? Think about:
 - Negotiation power in the value chain
 - Mobility
 - Market prices
 - Marketing
 - Export market
- What are the implications of this intervention?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Questions related to service provision

- What does the initiative do, regarding closing the living income gap, to target the service provision to cocoa by smallholder cocoa farmers in Ghana specifically? Think about:
 - Access to advisory and information services (extension services like CODAPEC, pest and disease management, market information, etc.)
 - Access to credit
 - Access to pesticides
- What are the implications of this intervention?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Questions related to consumption

- What does the initiative do, regarding closing the living income gap for smallholder cocoa farmers in Ghana, to target the consumption of cocoa? Think about:
 - Market demand
 - Diversification
- What are the implications of this intervention?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Questions related to stakeholder organisation

- What does the initiative do, regarding closing the living income gap, to target the organisation (in cooperatives) of cocoa by smallholder cocoa farmers in Ghana specifically? Think about:
 - Farmer organisations/cooperatives
 - Negotiation power
- What are the implications of this intervention?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Questions related to **regulation**

- What does the initiative do, regarding closing the living income gap, to target the regulation affecting smallholder cocoa farmers in Ghana specifically? Think about:
 - Government support
 - Policies targeting smallholders specifically
- What are the implications of this intervention?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Questions related to **coordination**

- What does the initiative do to target the coordination within the cocoa sector in Ghana specifically in order to close the living income gap? Think about:
 - Strategic frameworks in the sector
 - Sector platform functioning
 - Coordination between actor in the value chain
- What are the implications of this intervention?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Questions related to **investment**

- What does the initiative do to target the investments in cocoa by smallholder cocoa farmers in Ghana specifically? Think about:
 - Public investments
 - Private investments
- What are the implications of this intervention?
- What challenges and risks are encountered?
- Which opportunities can you identify?

Is there anything more you would like to share about activities within the cocoa sector and the implications of them on closing the living income gap for smallholder farmers in Ghana?

Questions related to **external factors**

- What external factors are influencing the income of smallholder cocoa farmers in Ghana?

Additional questions

- Do you have any additional input you think can be of added value which has not been discussed yet?
- Do you have any questions for me?
- Do you know more initiatives I should contact for my research? Do you have contacts within these organisations/companies?
- Can I reach out to you for any further questions or clarifications?



Consent form

Interview for MASTER THESIS [SSP3021] – Master’s programme on Sustainability Science, Policy and Society (SSPS) at Maastricht Sustainability Institute, Maastricht University

This thesis is part of the final stage of the Master’s programme ‘Sustainability Science, Policy and Society’ at Maastricht Sustainability Institute, Maastricht University. The thesis is written under the Fair and Smart Data (FSD) project of Maastricht University (<https://www.maastrichtuniversity.nl/fsd>).

For more information, questions or complaints please contact me, Nina Zwart (n.zwart@student.maastrichtuniversity.nl) or my supervisor Etienne Hoekstra (e.hoekstra@maastrichtuniversity.nl).

By signing this form, you agree to participate in this research (i.e. this interview) under the following conditions:

- The interview is voluntary and you can stop your participation in the interview at any moment.
- The interview will be recorded. The recordings will only be used by the researcher, Nina Zwart, to re-listen and transcribe the interview.
- The recording can be stopped at any moment upon your request.
- Until the moment of publication, you can always withdraw your participation in this research without providing any reasons. An email with this request can be send to n.zwart@student.maastrichtuniversity.nl.
- Data (transcripts and recordings) will be stored with care and no longer than necessary for the research. For study programs, raw data needs to be retrievable for 5 years (as a quality assurance measurement).
- In the case of data loss, the researcher commits her/himself to inform you about the loss and all details about the loss (i.e. what data has been lost, where and under what conditions/circumstances).
- You give permission to use information from the interview in publications (e.g. assignments, reports, thesis, and academic articles).
- **Please check what applies to you:**
 - I agree that my full name, gender and affiliation are used (e.g. Brandon O’Loughlin from McDonalds London).
 - I agree that my family name, gender and affiliation are used in publications (e.g. Mister CGanga or Misses Pietersen from the university of Stellenbosch)
 - I agree with mentioning the name of my company/ organization, the type of organization and my role/ function in the organization (e.g. a controller at the municipality of Amsterdam; a citizen in Jakarta)
 - I agree with mentioning my role only (e.g. one of the controllers)
 - I only agree with full anonymity (e.g. respondent X)
 - Other,

I understand all of the above and confirm participation

I confirm my responsibilities as researcher as

in this research under the stated conditions:

stated above:

Name participant:

Name researcher: Nina Zwart

Signature :

Signature:

Date:

Date:

Appendix 5 – Transcribed interviews

5.1 Interview Han Brouwers, Solidaridad, 27/07/2022 - translated

NZ What I was mainly wondering is, what is the relationship between Solidaridad and small farmers in developing countries and Ghana? Is there a direct link there or is it more through other partnerships?

HB That is mostly through other partnerships. Our field offices and country offices are mainly set up to set up projects, to lead and manage projects and to build up local infrastructure. We often make use of partner organisations, technical assistance organisations and service organisations in the countries themselves that carry out the actual field work. But it is always done under Solidaridad's responsibility. So it is true that we reach out to virtually all farmers - I cannot say this generically for one million farmers, of course - but for the most part all farmers are aware that Solidaridad is the ultimate point of contact. Very specifically, when it comes to data and consent and things like that, that is more my domain. That happens, just to put it bluntly, ninety per cent under Solidaridad's responsibility. So the relationship in that sense is that we set up programmes, often with farmers' organisations. Depending on the project, the focus can be on very specific sustainability issues, such as the more ecological side of agriculture. But ultimately, everything is aimed at strengthening the position of a farmer. Both financially and in terms of resilience in the broadest sense of the word. Climate resilience is becoming increasingly important. But that also means other things like the development of local markets, infrastructure and so on. Does that answer your question?

NZ And the ultimate goal is to strengthen the position of those small farmers. What do you think is the best way to do that?

HB That is a question to which I do not have a straightforward answer. First of all, it depends very much on the local context. Every country is different, every crop is different. Political, cultural aspects are different all over the world. So there are a lot of differences. When it comes to what is the best way, it is often.... Well let me put that another way, very clear objectives for a project. So what are we aiming for in this very specific project? That can be broad. On the one hand, as I said, it can be purely focused on agricultural practices, etcetera. But it can also be aimed at education, access to finance, etcetera. In my opinion, the best approach is to immediately apply standardised data sets, whereby we not only look at... What I have observed, just to bridge the gap, is that a lot of projects are, I would call it exaggerating slightly, single topics. So we have improved agricultural practices and CO₂ storage. A very specific project is developed for this. Donors often provide the indicators, the KPIs to be measured. And this is then very specifically aimed at such a project with very specific objectives. Then the programme starts and people are trained, go into the field and often a baseline takes place. So in the first instance it is measured: where are we now? Data is collected, etcetera. But all focused on that single set of KPIs. Then, and I have heard this literally from farmers in the field a number of times, particularly in West Africa, NGOs and other organisations roll over each other. Then another organisation comes along and has a different objective, such as access to finance. They then also start collecting data from the farmer. Then a third organisation arrives. It will deal with carbon sequestration, i.e. the storage of CO₂ in the soil. So farmers have sometimes said, 'Guys, you are the third NGO that is coming to visit this week. You all want data from me. What's in it for me? That is often the first question. But they also say that they are fed up with all that stuff. In my view, the best approach is to be very clear about what we are doing in the broadest sense of the word. What is relevant in the local context of the project. So if we are talking about cocoa and grains, what is relevant

there? Is it quality improvement, land optimisation, is climate mitigation important? And actually, access to finance is always an important thing for farmers. So make sure you take a broad portfolio as a starting point. That does not have to be applied directly in the project. Collect a standard dataset for that and use that as a basis for the interventions and the projects. If there is another organisation with a different problem, then the data is there. So I think that we as a sector, because we work with public money, are also obliged to share that data with other organisations, which are often seen as competitors. Say, listen, we have already built up a relationship with these farmers. We have already collected this data. If you want to build on that, fine, use the current dataset. Let's work together on that. And I think that is the biggest challenge. Organisations like ours are all competing for the same donor euro. Often, there is competition, but in practice, this is usually not so favourable for farmers. The second element is, and this is based on what I just said. In the end, if we work in a much more data-driven way, we will get much further, processes will become much more efficient and farmers will benefit much more from that. And that transition? I see that not only we, but many organisations are struggling with digitisation, with solid data, strategies, etc. So there is still a great deal of work to be done. So there is still a big challenge there. And if it is organised well, it will ultimately benefit all those farmers.

NZ So really a bit of organisation too in that respect? And cooperation?

HB Yes, vision in part. And ultimately, indeed, in the implementation, a very clear strategy that is partly focused on cooperation and that is very strongly data driven from day one. Based on a kind of standardised dataset that is ultimately beneficial for different applications.

NZ My thesis is specifically about so small cocoa farmers in Ghana. I don't know if you know much about that; but what are the specific projects that Solidaridad works with that are related to that?

HB We have had many projects in West Africa and in the cocoa sector. We have had a few very large projects, actually programmes, in at least four or five countries in West Africa. The project we are most active in at the moment, which will also be coming to an end soon, is an access to finance project. We are trying to set up a model that will eventually deliver a business case. And what it comes down to is, farmers have no access to loans, insurance or pensions. Purely for the reason that the data regarding ownership of the land, income, expenses, etc. is not available. The same as in the Netherlands when you get a mortgage you also have to hand over three or four years of income as proof. In order to take a step in that direction, data has to be collected so that a credit profile can be generated. And with those credit profiles, banks and financial institutions can more easily provide loans and pensions and insurance. That is nice to do once, but as soon as a project ends, there is often nothing. That is a bit of a tragedy in our sector. Many projects have a scope of three, four or five years. Then we leave and not much is left at the end. This is widely recognised and acknowledged. And one of the things we are doing here is developing a business model so that ultimately banks and financial institutions pay for those credit profiles. And ultimately, that should at least lead to a break-even situation. A kind of social enterprise has also been set up for this purpose, which should keep the process going in the future. So that is one of the projects. We have had quite a few projects in West Africa, which also looked very specifically at increasing production. On average, the yield per hectare can be increased by a factor of three, depending on the area and the reception of the farm. A lot of projects are aimed at that. So that is really aimed at increasing production in an ecologically responsible way.

NZ One of my questions is: what are the biggest barriers that are encountered in these kinds of projects? And so one of them is the short term of the projects, that it ends?

HB Yes, although more and more donors are indicating that continuity must be offered. So one of the KPIs is often a business model or business ownership, et cetera. In practice, however, this is a lot more difficult, because..... It's often the case, and we've noticed this in a project in Ghana, for example, where we have access to finance as a spearhead. It is funded by NSO, the Netherlands Space Office, because they want to promote the use of satellite data. So we have incorporated a satellite data proposition to monitor, for example, deforestation and a number of other things. Three years is a very short time. In the Netherlands, it may be possible to get sufficient traction in three years from the start-up phase. But in many countries, this is much more complex because you really start from nothing. You often have to deal with local regulations, local customs and habits. Many factors that can be complex. Because usually, you need permission from the authorities to do something. Such government involvement often takes a long time. So three, four years is often on the short side. And many of those ambitions - but I don't have any hard figures on this, by the way - many of those ambitions to continue a project after a certain period of time in the form of a business owner, etc., don't achieve that either. And that is a real shame. But again, I don't dare put a figure on it. So that is based on observation and feedback that I also receive from many organisations.

NZ Yes, and are there any other barriers that are important to mention? In projects like this that look at the income of these small farmers, among other things.

HB Yes, there are several. Look one of the most difficult things is often what I just mentioned single topic. So a very specific focus. Focus is good on the one hand. On the other hand, in my opinion it hinders the long-term potential. And what needs to change from donors, again in my view, is that there is a lot of emphasis on digitalisation. And it is often the case that money is made available to develop tools, to develop apps. Up to complete traceability platforms. There are now thousands and thousands of apps and other digital solutions. But nothing is done with consolidation. And it is very difficult to convince donors to invest in data analysis capacity, data warehousing. More the non-visible things that are crucial. Because it's nice to develop another app for a farmer with all that comes with it. But if that data cannot then be exchanged because taxonomies are incorrect, data structures are not in place, there is no decent data analysis capacity, because that is actually the big shortcoming. So I think that's an important factor. We talked about the time horizon. Actually, those are the most important two, from my perspective.

NZ And what risks does that entail, these projects?

HB One, that projects die a soft death after they are completed. Two, that it produces more of the same. Fragmentation, also on the side of the farmers. What I have just said is that today we are on the doorstep, tomorrow Rainforest Alliance will be there with a slightly different project. The day after tomorrow, SNV will be at your doorstep. Just to name a few Dutch parties. Not to mention the wide range. So there is a lot of fragmentation. And in the end, the biggest risk is that all these efforts will eventually result in the follow-up getting bogged down. And that with all the data, because there has been a lot of progress in that, data is becoming more and more extensive and structured. But in the end, not that much happens with all that data because there is not the capacity to analyse it and build on it.

NZ So this fragmentation is a problem in the sector? And both on the level of the initiatives that are trying to change something, but also on the side of farmers there who are not organised, if I understand correctly?

HB Farmers are often reasonably well organised. In associations, cooperatives, et cetera. But that is really in the traditional cooperative model. So joint purchasing, joint sales, support with the harvest, that kind of practical things. It is very difficult to actually follow up on these types of activities, such as an access to finance project, for example. And it's not so much the farmers, because they don't have the possibilities, but in particular how do you develop a... In the end it comes down to, how do you develop a local economy? What kind of infrastructure do you need? Which parties are needed and relevant in the overall picture? And I often make the comparison with the Dutch situation. Take Ghana, for example: one of the biggest challenges in the cocoa sector, apart from the work we do there every day, is scale and age. I think those are the two most important when it comes to cocoa. Farmers are on average believed to be 56, 57 years old now. There is little succession of young people. Everyone is moving to the city. Land owned by farmers is often split up in the inheritance. The farmer has three children, he has one hectare. Each child gets a third hectare. But if this continues for a number of years, a number of generations, there will be almost nothing left. So scaling up is an important element. Counteracting the ageing of the population is a major challenge. If you look at that, and that is the comparison you often make with the Netherlands. Fifty or sixty years ago, we had the same situation in the Netherlands. So then land consolidation started with the support of the government. At the time, Rabobank was a major co-financer. Farm takeovers, rejuvenation of the sector, et cetera. And that is, on a macro level, the big challenge for a country like Ghana, but also for Ivory Coast and many other countries where other crops are concerned.

NZ But maybe also a possibility, because there is a lot to gain there?

HB There is a lot to be gained. But if you look at the potential, and that is not only for cocoa. If you look at the whole of Africa, for example for palm oil, there really is enormous potential. And I'm not talking about exports, because 95 percent of palm oil is grown for domestic consumption. But there is enormous potential there, and that has everything to do with access to fertilisers, access to everything, in fact, the whole infrastructure. But as long as it is very small-scale, with very small plots of land, these investments are often very difficult. So that is why, in the broadest sense of the word, economies of scale are one of the most important challenges, for almost all countries.

NZ And what impact would that have on those small farmers?

HB Well, to some extent they stop. That's a good question, because I don't have an unambiguous answer. But in the end it is... Look, we talk a lot with banks. Banks often indicate that there are too many risks involved in providing loans, purely from the financial sector's point of view. Why? On the one hand, little insight into the income. But other elements, for example, who actually owns the land? Ultimately, an investment in, for example, mechanisation or otherwise, is not profitable if you only have half a hectare of land. So, in practice, scaling up means that farmers have to be bought out. Other farmers have to be financed in order to obtain land so that the plots of land can be increased in size step by step. And rejuvenation. That is one of the spearheads we are also looking at. How can we motivate, activate, help and encourage young farmers to invest in increasing their scale, etc. And what is needed to do that? And what is needed for that?

NZ Maybe a bit in a different direction. Solidaridad is of course doing a lot of things to help small farmers, also in Ghana. There are, of course, an awful lot of things you could do. What is based on what you will eventually do?

HB That is really based on local expertise. One of our spearheads, but that also applies to other organisations, but I don't know to what extent that is uniform. Our spearhead is really, we work with local employees. So our regional offices are not staffed with Dutch people either. They are really local people up to senior management level. We always work with people who know the local context inside out. We prefer, especially when we work with partner organisations, to work with young people who have an agricultural background, so who are agriculturally educated. If they are not, we also have programmes to help facilitate, stimulate, etcetera. Those people often come from the community itself. So back to one of your first questions; the staff we work with is often hired in cooperation with our partner organisations, local technical assistance. But they can also be educational institutions, schools, etc., where young people are trained. These people are then trained on the very specific programme that we are going to implement. And they go into the field. They know the farmers, they know the local situation, they speak the language, they know the customs, et cetera. A very concrete example: in the access to finance programme, we have found that we want data from farmers about their income, expenses and all kinds of other details. And we want to ensure that these farmers have access to loans, pensions, et cetera. There is absolutely nothing. That is often the case when you really go into the country. You go to local communities. Then you see that they often have no idea how they are supposed to get their loans and so on. So that's where it starts. Then we set up a programme. And that is not just something we do, many more organisations do it. We call it village savings and loans. What it actually comes down to is that we teach people in a local community how to save. And that is very simple. The most concrete example I can give is that in the Ashanti region in Ghana, we introduced the money box in a number of communities with a large number of villages. The money box is literally a box in which money goes. So all the farmers, all the residents, donate a very small amount once a week. But collectively, after a few months, it becomes a nice sum. This must then form a kind of guarantee, a buffer, for banks that will provide loans. So the risk is borne collectively by saving in, literally, the money box. And if a bank says, look, the buffer is large enough, then banks are prepared to take the first step. That process takes a few years. It's not like after three weeks of saving a bank says, I'm happy, here's the money. There is much more to it than that. But this is really completely attuned to the local situation, local customs, local knowledge. And it is slowly phased out from there. And all kinds of activities are then organised within that whole village savings and loans programme. Financial literacy training, other resilience training, etc. And that is how it is slowly but surely built up. So that the knowledge of how to run my business, how to manage the financial aspects of my farm and my family, slowly but surely becomes part of a project through the transfer of knowledge.

NZ Very so together with the whole community of such a village?

HB Yes, and that varies from country to country. Community building is often one of the most important elements when setting up a programme. Many farmers are often organised in cooperatives that have a strong regional character. There are very large cooperatives, by the way, but most of them have a fairly strong regional character. And most farmers are "organised" in the community where they live. They can be villages, they can be regions, they can be tribes, they can have many ethnic ties. So often really tribal. But community building is crucial.

NZ And when we look at the living income challenge. Which stakeholders are most important in overcoming it?

HB Again, it is the local authorities and financial institutions. Look, the discussion is often, especially when it comes to living income, living wage, that buyers, traders, large companies et cetera have to pay a fair price. Which is absolutely true. But that is a worldwide problem. It is not specifically related to Ghana. It also applies to Dutch farmers, who are also squeezed out. So in that sense, industry plays an important role there. Anyway, that is a completely different discussion. We can philosophise endlessly about excessive neo-liberalism, etc. That is really a different area. That is really a different domain. Our task is advocacy. So we try to demonstrate through projects that the prices being paid today are not fair. I'm not even talking about true pricing when it comes to the ecological footprint, because that should actually be included as well. But that is one part of it. Our work is mainly concerned with advocacy, i.e. continually raising the issue and demonstrating that we are doing so. And also working together with larger companies on more transparency in the supply chain. But that's not the solution in my view. The solution lies much more in professionalisation and scaling up in the countries themselves. And you can do endless calculations and offer a fantastic cocoa price per kilo. But if a farmer only has half a hectare planted with trees that are over twenty years old, he will never be able to achieve a decent yield. So the key is, how do local governments deal with this? Do they facilitate the increase in scale, for example? Do they provide sufficient education? Do they provide guarantees when it comes to taking out loans, for example? Do they ensure sufficient access to inputs, such as fertilisers and seeds? But take cocoa, if you want to rejuvenate a cocoa plantation or a cocoa farm. A cocoa tree only starts yielding after three or four years and the peak is only around the tenth, eleventh year, sometimes even further away. So that means long-term vision. And that requires money, but also local regulations that make it possible. The real challenges are often local, with all that that entails. And of course, large companies have a role to play. They might even be able to help steer it by facilitating things. They might even be able to help steer it by facilitating things. They may even be able to take responsibility by acting as a guarantor, for example for loans. That kind of model can be worked out in more detail. But if there is no change at the local level, it will always be difficult.

NZ So financial institutions and local governments have an important role to play. But you also say that, for example, the big companies also play a part. So it comes from many sides.

HB Yes, of course, they have to take their responsibility. Look at big companies like Cargill, EDM. But also brands like Nestlé, Mars et cetera. They could take more responsibility. This does happen, and Mars in particular has been quite active over the last ten or fifteen years in making a contribution with a farm development programme genuinely aimed at increasing yields and partly facilitating increases in scale. But if the local situation obstructs this or makes it difficult, it simply remains very difficult. There are also all kinds of practical issues to consider. One of the most important elements is also land ownership. Who owns the land? And that varies. But farmers who really demonstrably own a piece of land are quite difficult to identify. It is often the case that, for example, a chief or a king or really the That also often complicates matters.

NZ So it is all very complicated?

HB It is very complicated, yes. Maybe a cliché, but we are really dealing with the consequences of years of colonialism and divide and rule. And also the difficulty of understanding local customs and cultures. You can jump up and down but if, for example, an Ashanti king in Ghana says 'nice proposal but we're

not going to do it', it simply won't happen. And that kind of process is just very complex. But that doesn't change the fact that it has to happen. I mean, who are we to determine what should happen? But ultimately, in the interest of the whole world and a sustainable planet, it is important that something happens. And that is very complex. Anyway, by starting with good data collection, insight, etc., we will make progress.

5.2 Interview Jack Steijn, Equipoise, 29/07/2022

NZ My thesis is about the living income challenge for the cocoa farmers in Ghana. And I was wondering, which stakeholders do you think are the most important when tackling this challenge and why?

JS I think the farmers themselves are very important. The organisations that provide services to farmers, cooperatives, farmer organisations. And actually, actors in the supply chain. What you often see is cooperation within the supply chain to source cocoa from a certain area, in Ghana for instance. And you see all parties in that supply chain cooperating to improve sustainability. And for instance, the projects we were involved with in Ghana was with Tony's Chocology and Albert Heijn, and they were sourcing cocoa from an area in the North-West of Ghana. And that was a cooperative that also works with Mondelez. And you can see that on the one hand, those three users of cocoa were actually working with the cooperative to make sure that they provide good services to their farmers and that their farmers can produce sustainably and have a living income from their work.

NZ Okay. You've already explained it briefly, but if you have to say what is your initiative, Equipoise, exactly doing regarding closing the living income gap for smallholder farmers in Ghana?

JS Well, as I said, we have co-financed some projects that contribute to the revenue of the farmers. Living income was not an objective in those projects. But improved income certainly was. And this is where you run into some definition issues. Because if you aim to improve the income of farmers, is that necessarily a living income objective? Or are you then..... Well, a living income is a concept that is based on calculations of what farmers need. Whereas another approach is that you help farmers earn the money they can from their work. And so I think our projects were mostly confirm to the second definition.

NZ But they also overlap in a certain way, right? The living income is really a calculation. Which can also be debated again because there's a lot of different calculations that are made for the exact living income. But I think increasing income is also part of their living income, of course.

JS Personally, I think that we will find out in a couple of years that we did it all wrong. That we are focussing too much on price paid for the cocoa at this moment. Instead of, on other things that I think should also be taken into account if you really want to intervene and improve the conditions of cocoa farming.

NZ And what are those other things?

JS First of all, entrepreneurship of the farmers. And I think what is important is that you would make them less dependent on prices for cocoa and give them support into diversification and help them access other markets next to cocoa. I think if you concentrate too much on price without taking into account the volume and the effect of volume, then you will end up with big problems in the near future. And so I think the discussion at this moment is too much narrowed down to things people easily can explain, and they are not really solving the problems.

NZ Okay. Yeah, it's a complex problem indeed. And when you look at what you are doing with your company, what are the implications of these intervention and methods on these farmers?

JS So I think the general impact is, on the one hand, we help them improve the quality of their products. We help them find new markets for those products. The interventions that we have co-financed have

made farming easier for them and have made farming more attractive. Farmer organisations were put in a better position to support the development of their farmer's professionalisation. So it is very much strengthening their entrepreneurial capacities and helping them find markets for their improved products.

NZ And what are the challenges and risks that are encountered in this process?

JS Well, of course Ghana is a very particular country. Because the cocoa sector is fully nationalised and all farmers are obliged to sell the cocoa to the Cocobod. And the Cocobod sells to cocoa to purchasers, also in Ghana. And that makes the system very vulnerable for bureaucratic issues and corruption, which is a huge problem in Ghana. I think the former president of the Cocobod is still in prison or the process is being run against him. Because he has lost several hundreds of millions of euros. Not sure whether it's hundreds, but let's say around hundred million. And they are also the monopolists of providing services to farmers. And for instance, at some points they served pesticides that were deluded. So the farmers were using pesticides that were not strong enough to kill the insects. And then the insects became resistant to those pesticides. Then the problem worsened. So I think the Ghanaian cocoa economy would be better off after some liberalisation. There are very strong rules that are maintained by governments. But you see now that there are lots of issues. And that doesn't help farmers.

NZ I think I read that it's is becoming better, regarding this these problems. Do you also see that?

JS There are certainly improvements. But I think in general, the past has showed that communist systems like this are not in favour of the people that they work with. Ask anybody in Central and Eastern Europe and they will confirm.

NZ Are there any other challenges and risks besides the way the government there is organised?

JS Well, if people only look at the price and not at the volume, and if volume of supply exceeds demand, then on the long run prices are under pressure. And this makes the system very vulnerable because at some point there will be piles of cocoa and that will come to the markets and then there will be adjustments. So, I think our price is important, but if you don't do anything about volume, then then you are creating problems in the future.

NZ On the other hand, which opportunities can you identify regarding this?

JS I think that farmers are very creative persons and if they are supported to develop other cash crops and if they are supported to bring those cash crops to the markets, then they can have much more income from their lands. And I think that one diversification option is to be rewarded for the sequestration of carbon, because cocoa farms absorb a lot of carbon in the soil, as well as in the plants. And if farmers are rewarded for this, then they would have an extra source of income. And I think the new agreements in Africa about liberalisation of markets, the African Free Trade Agreement, offer opportunities for farmers to not only sell to Europe and North America, but also to other countries in Africa. You see development of wealth in Africa, meaning markets there are growing as well. So I think that if there would be the right supports for farmers and most of all in helping them to find new markets, extra sources of income related to the work they do, that there would be much light at the horizon. I think initiatives like KOA, they are great, and they can also offer an extra source of income. Agroforestry is an important method for income generation. So taking a wider approach to cocoa

farming across sectoral borders and help farmers access those other markets. That will certainly bring them a living income. But then the income will be generated through market forces, where [...] benefitted from [...] and that will have a much more sustainable impact. Other thing that is threatening farmers, is the average size of cocoa plots, which is now under two hectares. And this is because of the system where the children inherit the land from their parents. And it is being split up and split up and split up between generations. And even now, when I was there, many farmers indicate that they don't have enough. That they have very small plots and either they grow cocoa or they grow food. They cannot grow both. And then if the next generation is even speeding that up. So that's important.

NZ So the farms are getting smaller over time, increasing the problems that come with it. And a bit in a different direction. So you are a sustainable consultancy regarding cocoa; What are you basing your interventions on? Are they based on literature, expertise or something else?

JS How do you mean where are they based on?

NZ You are implementing certain methods and interventions. Where are they based on?

JS They are based on experience, on exchange of views with other people, conviction. Not so much literature, but written information. And then, of course, sometimes we work together with people that just come from university. So that always gives new inputs to our work.

NZ So we've talked about the interventions you are doing with your company in general. For my thesis, I am dividing them into eight sector activities. So I am going to share my screen. [shares screen] So these are the 8 sector activities I'm looking into. Which ones do you think you are working with?

JS two, three, four, five, seven, eight

NZ So everything besides production and regulation?

JS Yes. And even regulation. It is certainly not regulation. But I was the chair of the ISO committee that has set a new standards for sustainable and traceable cocoa. So standardizing is part of what we do.

NZ Do you think we've covered them all with what we talked about already? Because otherwise, I would like to go through them one by one and see what you're exactly doing and what the implications are of that.

JS Okay, let's have a look.

NZ Okay. So you said that you work with value chain development. What are you exactly doing regarding that?

JS Well, that is indeed as I said, by helping farmer organisations access new markets and prepare for those markets. This is value chain development. So new products. And something that we are not working on, but I'm writing on it, and I hope to be able to work on it at some point: Helping farmers benefit from the carbon sequestration. You can say that's a new supply chain. I'm also chairing the Traceability Working Group of the cooperation of Initiatives for Sustainable Cocoa, ISCO's. So that's not so much a supply chain development, but improving supply chain transparency, which of course is very important if you want to see the impact of what you do. And if you want to be able to guarantee that everything you do indeed is sustainable.

NZ What are the implications for the farmers on the development of the value chain?

JS Well, if they produce more value, then they earn more money.

NZ And what particular challenges and risks are encountered in this process?

JS Well for Ghanaian farmer organisations it's not easy to be in direct contact with customers because the Cocobod is in between. So that is an issue.

NZ And what opportunities are there?

JS Well, some cooperatives are producing organic cocoa and they have some exceptions. They still have to go through the Cocobod, but the cocoa is segregated. And in other cases, cocoa can be segregated. But it's always an enormous investment. It's improving. But yes, I think if farmer organisations would get together and.... The other thing is that organisations are mainly branch or sector organised. So you have cocoa co-operatives and a cashew co-operatives, but it's very rare to find a cocoa co-operative that also helps cashew farmers. So it should be more integrated.

NZ And what good would that do? What would be the implications of integrating those?

JS If a farmer would diversify and have cashew trees that could contribute to the shade for cocoa trees. Then he would move towards agroforestry and that would contribute to the reforestation of the country. And the farmer would earn from the cocoa as well as from the cashew or the mangoes or the avocados or whatever grows on trees, oranges. So that would have the advantage for the farmer, he would have a diversified income. An advantage for the country would be more forests, more trees. And an advantage to the international climate because there would be more carbon absorption. However, the cocoa cooperative is working on cocoa. So who's going to help the farmer bring the cashews to the market?

NZ Yeah, not that cooperative.

JS Yes, and that's.... I mean, I travelled all over the world and I've seen that in Colombia, Ecuador, farmers benefit from seedlings for mango trees through their cocoa cooperative. And then when they ask the cooperative; Okay, do you help the farmer bring the mangoes to the markets? Oh no, we are a cocoa cooperative. So it is something that's happening all over the world. But this is something that you should be able to change.

NZ And then moving on to service provision. What does your company do regarding service provision for these cocoa farmers?

JS We are sometimes involved in training projects and those are market trainings. So how to stand out from other cocoa suppliers. How to develop other cocoa products and bring them to the markets, so these kind of services. And through projects that we have co-financed, we also support the development of our services and help the cooperatives improve their services to their members.

NZ And what are the implications of these trainings?

JS Improved market access.

NZ And what are challenges and risks that are encountered in this?

JS Of course, you have to access to markets and there's a lot of competition. And there is more supply and demand. So challenges are that you are investing, but you are not selling.

NZ So that's a challenge for the farmers?

JS Yes

NZ And what opportunities are there in this area?

JS Well, larger markets. More sales at higher prices. Fixed contracts, long term contracts.

NZ Anything else regarding service provision?

JS No.

NZ Then we're going on to consumption. What does your initiative do regarding the consumption side of this story?

JS At Chocoa we also organise a consumer fair. And because of Corona it has stopped. In 2020, just a week before Corona, we had the event, some 8000 visitors. And in '21 we couldn't have it, of course. And in 2022 we didn't want to take the risk of doing it. But we are now geared to do this in '23 again. So we communicate to consumers about sustainable cocoa and about the virtues of sustainable cocoa. And we have a cocoa fair, a chocolate event where people can come and taste and buy sustainable chocolates.

NZ What are the implications of these type of events for these smallholder cocoa farmers?

JS Well, it's very indirect, of course, but the chocolate made of their cocoa is being sold now.

NZ Are there any challenges and risks in this process?

JS Yes, for us. I mean, if you organise everything and there's a new pandemic, then doors are closed and we are bankrupt. But that is not for the farmers.

NZ And moving on to stakeholder organisation. So you already said you were for working a lot with farmer cooperatives. What do you do to strengthen them?

JS No, this is more about organising supply chains. And this is what we did in the Cocoa Origins projects. Where because of the funding we could promote partnerships involved in supply chains that would otherwise not have existed.

NZ And what are the implications for the smallholder farmers of this?

JS That they receive the benefits of sustainability linked to a market where they can sell their products.

NZ You said it's also bringing together different stakeholders in the value chain. Are those also stakeholders that kind of have the same goal? Because there's a lot of organisations within the sector. That maybe also have different goals, all of them?

JS Yes. But if you talk about the supply chain, then the objective of one may be selling and the other may be buying. But the common objective is to have good cocoa and make good chocolate out of it. So I see there's a lot of... And also in discussions with, for instance NGOs, I don't think there's a lot of

issues with the general direction that we need to take. Everybody's more or less walking in the same direction but some people want to walk faster than others. And that's the only thing. So I don't think there's a lot of discussions about differences of opinion or even opposite interests.

NZ And how do you see the negotiation power of the smallholder cocoa farmers? Do they have any?

JS Of course they don't. But that is because they are facing the Cocobod. And the Cocobod is imposing prices and services. And of course, they can vote for another president and then they will have another management of the Cocobod. But it's not the farmer who is negotiating with the chocolate companies.

NZ As I'm perceiving it, you see a lot of problems with the governmental organisation regarding cocoa in Ghana?

JS Well that's too black and white. The Cocobod has done a lot of positives as well. And at some point one needs to evaluate how to proceed. Fact of the matter is that there was a lot of corruption and misuse of the means. Fact of the matter is that the farmer is not in a position to negotiate prices because he just has to sell to the Cocobod at the price that the Cocobod determines.

NZ Then moving on to coordination, what does your initiative do regarding coordination?

JS Well, let's just skip that one.

NZ Yes, sure. And then the last one was investments.

JS There was the co-investment that we did together with IDH.

NZ To projects that are trying to do something there, right? Or directly to the farmers?

JS Yes

NZ. So investing into projects. Regarding investments for the farmers themselves, do they have any opportunities to invest?

JS No, not much. They don't often have access to credit. In some villages where village saving and loaning systems operate, you see that farmers are really investing. So there it works. It's not excluded but it's not easy.

NZ And is there anything more you would like to share about activities within the cocoa sector and the implications of them, for these smallholder cocoa farmers in Ghana?

JS No, I think we have expanded quite a lot on this.

NZ Good. What external factors are influencing the income of smallholder cocoa farmers in Ghana? We've already discussed them throughout the whole conversation, I think. But are there any you would like to highlight or elaborate on?

JS Well, of course, the weather is very important. So as an external factor, if the weather is bad than the harvest is bad and their income will fall. So, there are lots of diseases and the impact of diseases is growing. So that's impacting a lot. In Ghana, there is a lot of illegal gold mining. So there is quite some impact. Sometimes trees are stolen. The farm is destroyed because people are taking out a large tree. It used to be, but I think that has changed, in former days the trees were owned by the government

anyway or by the community. So if they decided that you should sell a tree, then the logging company just came in and fell the tree, destroying the cocoa that was there. Well, as I said, the system of inheriting, leading to smaller plots. Communities sometimes own the lands and they give the right to a farmer to use it for cocoa but if he wants to diversify into something else, then he needs the new permission from the.... You sometimes hear that the farmers have invested a lot in improving the farm, and then the chief of the community decides that he will give the farm to a cousin of his. So sometimes farmers don't dare to improve their farm because they are afraid to stand out and lose their farm to other people. There's a lack of labour, so farmers need to do everything themselves because there are not enough hired workers. And if they come, they show up too late and they go too early. What else? Lack of inputs. Inflation, this is a large problem at this moment. Prices go up very, very fast. So access to everything that needs to be bought, be it food or inputs for the farm. It is an issue. Yeah, lots of things. Life is not easy for a cocoa farmer.

5.3 Interview Gaël Lescornec, IDH, 29/07/2022

NZ What are the type of projects you are focussing on?

GL So, we work at multiple levels. And in terms of projects, I would say we're working with companies. So cocoa traders especially, and cocoa brands. At two levels. One is really to get commitments from those companies around living income. So particularly through the platforms, the European platforms. So IDH is leading, or the secretariat convening the DISCO platform, which is the Dutch Initiative on Sustainable Cocoa, as well as the Belgium, it's called the Beyond Chocolate Partnership. And at that level, we are basically convening different partners around living income commitments. But also working with those partners as a collective and as individual to make progress around those commitments, really turning them into action. And so there's a bit of convening work, which is not necessarily just project based. But then it's also guiding companies around their approach to living income. Which I would say, I think there's a misconception of talking about living income projects. Because the way that we see it and the Living Income Community of Practise and I think it's well recognised. It's really looking at what are the trading and sourcing arrangements and procurement practises that enable living income and also the service delivery interventions that enable living income. But it's really looking at that whole entirety and not just putting the onus on farmers and are the farmers just going to get what they need to have better cocoa? There's really a lot around price, obviously. There is a lot around contract terms. For example, are cooperatives in a position to really think long term and have access to investment in order to serve their members properly? And that, one example of that is one of the sourcing principles from the open chain, the Tony's Chocolonely open chain. They are one of the companies that we're working with, particularly because the sourcing principles are looking beyond just productivity and diversification, for example. But really looking at how do we have a top-up pricing and also how do we look at the traceability systems, the contracts of the cooperatives that really enable a better distribution of empowerment and ownership with the cooperatives. So that actually is a perfect example of a project or programme that we're embarking on. Really to look at scaling the open chain, but to make sure that it really has an impact on living income. So what does it take to really demonstrate impact on living income? And how do the sourcing principles, for example, of the open chain link to that? But a really important element to that is volumes. In terms of really ensuring that the more volumes are being sourced from open chain, the more impact you can have within those cooperatives. That's one example. We work also, and it's not just IDH, but I think there are a lot of different kind of models that we're seeing on living income in cocoa today. So I just spoke about the open chain with those five sourcing principles, which by the way, really highlight the need for a combined approach of different interventions. If there's one thing that we know, and there's a lot we don't know around the impact of different interventions on living income. But if there's one thing we know is that the more you combine different interventions and procurement practises, the more results you're going to get. So, not at all dealing with price or not at all dealing with production costs or not at all dealing with some of the contracts with cooperatives. That is definitely going to be a missed opportunity. And I wanted to mention to you, another initiative that we're involved in at a very different level. because again, we're talking about almost... So what different types of living income initiatives or structures do we see? So I gave you the example of open chain and how we're involved in that. But another very different one is the Nestlé Income Accelerator. I don't know if you came across it before?

NZ Yes.

GL So there we're looking at something completely different because it's not the business model per se. It doesn't deal with contract terms or with pricing, etcetera, but it's an approach of unconditional cash transfer to incentivise certain behaviours. So both around cocoa income practises and non-cocoa income practises. And here it's really interesting because there's the potential to really... In a certain way, there is also a kind of price top-up. It's just not through rewarding cocoa. It's just rewarding certain behaviours and practises. And it'll be interesting to see in the coming years the extent to which that has a long term impact on behaviours that actually lead to more profitable businesses. And here the role that we've been playing as IDH has not been so much at an operational level, but more as a kind of overseer and governance oversight of that initiative. So that's a very different role that we play. And then perhaps at another level, I can give you just another example is: So we've been also working quite closely with Barry Callebaut, which is the top trader in cocoa. Looking at basically working with them and investing in gathering insights on the impact of their different, I would say projects, on living income with different brands and different clients. And so whether it's Nestlé, Mondelez, Ben and Jerry's and trying to see, okay, these different initiatives that Barry Callebaut is working with these clients, they involve different sets of interventions or different practises. We'd like to know, just like you'd like to know, what is working and what's not working. And so we have this, it's basically using farmer field books, with a company called Agri Logic. And we've had a few reports that have been published in the past that I can refer you to. But in that context it's really giving us quite important insight basically on what's working and not. So that was a mouth full.

NZ You've talked about a lot of different levels and stakeholder groups. When tackling the living income challenge, which of these stakeholders do you think are the most important and why?

GL So when it comes to the private sector, when it comes to supply chain actors, there's a really important role that chocolate brands play. Because one, they are kind of public facing. So they really are telling the living income story. But at the same time, they're also requiring certain procurement practises. And they're the ones who are dictating a little bit how the terms and conditions take place with the traders and the suppliers. And so a lot of that has then ripple effects with the suppliers and their relationship with the cooperatives and farmers. So I think definitely a really big focus is on the brands. And so therefore, that's why IDH works very, very closely.... So we, for example, I mentioned the work we're doing with the Nestlé Income Accelerator as well as with the Tony's open chain, also with Ben and Jerry's, which is a Unilever brand. But more broadly, within Unilever, there's a global programme between IDH and Unilever on living income and living wage, and cocoa in Cote d'Ivoire is part of that. But for us, the reason why we really start investing at that level is because it has a real ripple effect with all the other cocoa companies and traders. But I would say at a second level, it's also working with those traders to understand what's their offering on living income to those clients. So that's the private sector. But then when it comes to, I would say, outside the private sector, the absolutely critical stakeholders are the producing governments. So particularly in this case, we're focussing quite a lot on Cote d'Ivoire and Ghana. Including a regional government initiative that has recently been established. It's the Initiative Cote d'Ivoire Ghana Sustainable Cocoa, and it's called CIGCI. It's quite critical, particularly for living income, because they're really working to finding ways to work with industry to make pricing work better for farmers. When I say pricing, it's the farm gate, but also the LID, Living Income Differential, and how to basically manage the whole pricing mechanism in a way that really ends up benefiting the farmer. But also focussing on using the regional standards that have been recently, I think was last year, approved. So a really important governmental, regional, governmental body there. And of course the consuming country level governments, particularly the

European Union with a lot of new momentum, commitments and also resources to focus on a sustainable cocoa sector. So I would say in terms of industry, the brands and the traders. In terms of government, the producing and consuming governments, and really unlocking much more constructive dialogue between government and industry.

NZ I was wondering, what is the relationship between IDH and these smallholder cocoa farmers in Ghana? Are you directly in contact with them or more through the collaborations you have?

GL Through the collaborations we have, absolutely. So we don't implement on the ground. We do a lot of convening with those partners, so we work a lot with.... So in Ghana, for example, our office will work with the industry members, with government and many other partners. Initiatives around living income, but also very much initiatives around improving environment. So we have the Cocoa Forest Initiative, which IDH runs as a secretariat together with the World Cocoa Foundation. So that's more environmental. But even within that, there are opportunities around improving incomes.

NZ You said already looked a bit of my questions, right? So I have divided the activities within the sector in eight categories. I don't know if you saw them, I can also share my screen than they are on there?

GL I think I have them: Production, value chain development....

NZ Is IDH working with all of them, or some in particular?

GL So in Ghana... The thing is, because we are working with companies and partners that address most of these, I would say that probably all. Because we work with, for example, the regional initiative, which looks at regulation. We work with companies that look at production. So consumption, no we don't. We work mainly at the sourcing side. So production, through our company partners, definitely. So value chain development is a really interesting one and particularly in Ghana. IDH is obviously not just cocoa, but we work on multiple commodities and multiple regions and we have different units, etc. And we have a whole value team development department which actually is very active in Ghana, but in completely different regions as the cocoa regions, it's up North. And so it's with different companies, different products. It's in collaboration with Nestlé and the MasterCard Foundation. So that's really value chain development, but outside the context of cocoa.

NZ Let's run through them one by one then. I think that's best for ordering it. You've already touched upon multiple things, so if there's any repetition, just say so. But related to production, what does IDH do related to production to close living income gap for these smallholder farmers?

GL So we work with companies and especially traders who have a very specific approach and interventions. So particularly when it comes to service provision, your number three, in order to improve production. So it's through good agricultural practises, through coaching and a lot of that. So for example, what we do do at our level, we do a lot of convening, we do a lot of co-designing and also investment. And particularly in Cote d'Ivoire, so not in Ghana. But in Cote d'Ivoire we actually just launched a programme that looks at mobilising investments and access to finance for cooperatives and farmers in order to work around better productivity, looking at inputs and coaching and services. So that's the way that we would be involved in that.

NZ What are the implications of these interventions for the smallholder farmers in China?

GL What are the implications...?

NZ How does it impact their income?

GL So I think what I was highlighting before. If you're only working on production related interventions... Unfortunately, the past few decades have shown us that, no, it doesn't do anything to improve production or to improve incomes. So really, if we want to start looking at moving the needle on their cash flow, on their business opportunities, we need to look at wider income drivers than just production.

NZ And could you say that's also a challenge currently out there, that there's a lot of focus on production and prices rather than a more holistic view?

GL I mean, I wish there was more focus on price. I think it's all very much productivity. If we if we had to select one, it's still very much productivity. That's a major challenge.

NZ And any other challenges and risk related to the production side of the story?

GL I guess it's the same in Ghana or in Cote d'Ivoire, but focussing only on production and productivity makes obviously the farmer, but also the co-operative, much more fragile because you're not looking at the household in itself and you're not looking at the farm holistically. And so therefore, there's also a dependence that is kicking in around cocoa, which makes the farmer much more dependent and fragile and less resilient. And particularly because we know that the productivity and the pricing is quite volatile just economically, but also in terms of climate change. The two cocoa seasons have really been hit pretty hard in terms of unpredictable weather patterns. So all that makes it that they just have much more risks if you're just focussing on productivity.

NZ What opportunities are out there?

GL For what?

NZ Regarding the production side of the cocoa.

GL So opportunities just in general or...?

NZ In terms of how production can increase their incomes, so improve their living incomes.

GL So I think if the approach to productivity is much more holistic. So it really takes into account the overall farm. So that means like diversified income. So not just the production of cocoa but the productivity of the farm. And then also looks at the broader households and the broader household needs.

NZ And then for the second one, the value chain development. What does IDH do regarding that for closing living income gap for smaller cocoa farmers?

GL So just as I mentioned, I think as of now, we are only involved in value chain development just in Ghana and with just Ghana farmers in general, but not necessarily with cocoa farmers. And I do think that this is important to mention because as I work in the cocoa programme and we really want to make sure that cocoa farmers are earning a living income. I think there's also a danger or risk in categorising farmers like cocoa farmers or cotton farmers or... Because the fact is that they need to identify the different opportunities that makes them more profitable. And us trying to categorise and only investing in one commodity is a little bit risky. So, yes, I think value chain development is really

important. And having off takers, working with off takers that can that can really guarantee other markets outside of cocoa for diversification, is super important. But we haven't yet seen, I would say, a large scale opportunity to do that within the cocoa sector.

NZ And what are the challenges that are encountered in this?

GL For value chain development in the cocoa regions?

NZ Yes.

GL Well, several actually. Because one, the whole value chain development approach means that you also need to be aligned with the priorities of the country with the capacity on the ground. In terms of also finding the right suppliers, the right capacity, the right infrastructure. But also ensuring that you have the right offtake organisation, companies that will buy the products both locally and possibly in export. So all that takes a bit of time to work out. And it's also about facilitating, I think, quite a bit of pre competitive alignment between different cocoa companies, but also with other industries.

NZ What are opportunities regarding value chain development for the cocoa industry in Ghana?

GL I think there are there are definitely opportunities. We know definitely quite a few examples of really kind of niche value chains that have.... I wouldn't call it necessarily value chain development, because there's a fine line between also just projects where, for example, [...] has been encouraged and also off taked with specific cocoa companies. But I wouldn't necessarily call that value chain development. So it depends on the scale that you're looking at. But I think definitely there are opportunities. I actually had a colleague at IDH who's specifically looking at that, I believe in right now in Cameroon and also possibly in Cote d'Ivoire. So unfortunately we, we explored our opportunities and we said in Ghana, but as I mentioned, the opportunities were not necessarily in the same regions.

NZ Anything else regarding chain development you want to say?

GL No. I think it's an important, sustainable, long term approach for diversification. But it's definitely something that requires quite a bit of long term, and convening of different partners.

NZ And how do you see these long term strategies coming about now? Do you think there's lack of it?

GL No, I don't think there's a lack of it at all. I think there's increasingly a lot of different companies and industries coming together to.... They realise that there's a real interest and there's a real win-win situation. In developing, and being able to have multi crop farming systems that different companies, industries can benefit from.

NZ That's good to hear. Then to the next one, which is service provision. What does IDH do regarding service provision that helps to close the living income gap?

GL So I think similar to what I was mentioning around productivity. So we work with supply chain actors, players to, for example, improving service delivery. So that's one. Understanding what are the opportunities to have, like I mentioned, better access to inputs or better access to training. What we do do as well, which is a big part of our work at IDH, which is what we call Service Delivery Model diagnostics, SDM. It's basically working with different companies looking at their supply chain. So let's say that we did Ecom in Ghana last year and really understanding what are the opportunities within their supply chain model to basically improve service delivery so that it's better for the farmer, the co-

op, or not the co-op in Ghana, and the actual the business finally comes. And with those insights, it allows both the company to look at what they could be improving, but also IDH, in how we can support that. So that's at the level that we support, I would say, service delivery.

NZ And how do you say service delivery has an impact on the income of these farmers?

GL So I mean, again, same with production, it has the potential to. But just by itself... If you just do service delivery, if you just do training but you don't have the right price or you don't have the right incentives or you don't have the right the long term contracts that you need to invest in your farm, etc. You need the incentive and the motivation. So it's necessary, but not sufficient.

NZ And other challenges and risks?

GL No, I think not.

NZ And opportunities?

GL I think I mentioned it. If it's combined with other interventions, than it has a much better potential to have an impact on incomes.

NZ And then regarding stakeholder organisation, I think you already mentioned a lot. Because you're working on so many levels and bringing the stakeholders together. How do you see that impacts the income of these smallholder farmers?

GL When you mean stakeholder organisation, what do you mean exactly?

NZ It mainly means organisations of the farmers I see here now.

GL Oh, like cooperatives? So no. Working with cooperatives is mainly again through the companies. And we certainly see them as a major stakeholder in the convening that we do.

NZ And why is that? Why are they a major stakeholder?

GL Because they're the ones who provide all the access to services and products that farmers need to be profitable. So whether it's access to finance, access to trainings, access to inputs. I mean, not in Ghana, there you have a different system with the LBCs. So it's not necessarily like farm organisations. But you still have that kind of one stop shop which provides everything that the farmers require.

NZ And do you also work with the Ghanaian governments?

GL Yes, very much. Cocobod, but also different ministries. So for example, when we work on Cocoa and Forest Initiative, there are different ministries dealing with the environment. So we work with Cocobod very closely as part of particularly the Cocoa and Forests Initiative, but also this regional initiative that I told you about. That represents Cocobod in Ghana and the [...] Cocoa in Cote d'Ivoire. So through that, we work also very closely with them.

NZ And how do you see the role of the government in increasing the income of farmers?

GL Pretty critical. I mean they're there to set the enabling environment. So the right policies, the right regulations, the right supply chain management, the right agricultural policies, also the right services, the basic public services. Actually, living income is a national issue. I would say it's in their mandate.

Anything else, for example, the work that we do, particularly with companies, etc., is very much within the context of the government priorities on this issue. And the government priorities on this issue is around price.

NZ And do you think that's a good thing, that they put so much emphasis on the price?

GL Yeah, I mean, it's not really what I would say what I think necessarily, but price is absolutely critical and particularly when we look at in the realm of what is in the control of companies. If there's one thing that's really in the direct control of companies, definitely price is. Now obviously in the cocoa sector in West Africa and Ghana including, there's a farm gate that is established. But within that, there's also different ways of managing price. Depending on different times, like the future contracts that you have. When do you make the payments? When do you withhold payments? And there are also opportunities for ensuring top ups on top of that price. So there's quite of a lot of different opportunities, I think, to address the how pricing can actually better work for farmers today. And that needs, to be honest with you, it really needs to be a constructive arrangement between the governments and industry. And that's, I think, what we're actually seeing that momentum right now, which is quite positive.

NZ And besides this, are there any other opportunities for the government to work on this problem?

GL Everything that I just said before, all the different policies, the regulations, services.

NZ And regarding that, IDH takes a major role in coordinating these collaboration, doesn't it? Or how does it work?

GL I wouldn't say major role. Let's say that we definitely are an important stakeholder. In supporting especially that dialogue between supply chain actors and government.

NZ And this coordination, do you think it's important for this challenge?

GL Yes, definitely. Aligning different interests and aligning different approaches. The way that different companies and for example, government are looking at living income. I think there's it's absolutely critical that there's a coordinated approach and that people are speaking the same language and see where they fit in those solutions.

NZ And what are the main challenges when doing this?

GL Well, I think the main challenge is that everyone has their interests. The fact is that you have a very monopolised, high, high value concentrated chocolate industry. That is worth \$110 billion. And you have some of the poorest countries in the world. That are just struggling with just very basic, very basic.... even education and health issues and governance issues and absorbing capacity issues. And so you have very different interests at play. And so trying to come up with win-win situations where you're trying to avoid a total exploitation of cheap labour while at the same time really bringing value to the cocoa, to the chocolate industry, to the farmers. It's a tough balance, but it's one that I think is at a unique crossroads right now between government and industry, because there's just so many different platforms and initiatives to have those dialogues.

NZ So a lot of fragmentation in that sense?

GL Yeah, just a lot of opportunities for better coordination and for better, just alignment. So, for example, this regional initiative just launched an economic pact between industry and producing country governments. And so I think that's really the essence of what they're trying to achieve, is really trying to get some kind of a collective agreement on what should be the best way to, for example, manage the whole pricing. And also to compromise a bit. It's important to have a trusted platform where you have a safe space to be able to negotiate and compromise for the sake of having a sustainable supply chain in the future.

NZ And does IDH do anything related to investments?

GL Yes, very much. So particularly in Cote d'Ivoire, not so much in Ghana, in cocoa. So we have a big programme that works with financiers and banks and financial institutions to basically mobilise investments for cocoa farmers and cooperatives. But I think just in general, as IDH, beyond cocoa, it's a big part of our work, trying to mobilise investments and working through co-funding. So the way that we work is really to put up co-funding in order to leverage other co-investments. So for us, the whole mobilising of resources is a big part. And we also have investment funds that also come in for very specific purposes.

NZ And you say it's active in Cote d'Ivoire. Is there a reason it's not that active in Ghana?

GL It's just because it's a programme that was established with the government of Cote d'Ivoire. So I think we do have an ambition for it to be replicated particularly in Ghana and possibly Cameroon. But it's just not for the immediate future.

NZ And these investments programmes, what are the implications on the farmers in, for example, Cote d'Ivoire, of this?

GL So it depends, again, if it's just to take out a loan, it's shown that that isn't enough. There needs to be a whole range of.... How are they using those loans? Are they seeing profits like return on investment from taking out those loans? Up till now, we've seen that actually that hasn't been the case. They don't go to get another loan because they haven't seen their business being profitable. So in order for these investments to work, they need to demonstrate better productivity but also better incomes for the household or else they're not going to be.... If they're not leading to a good business case, then there's no reason why the farmers should reinvest. And right now, to be honest with you, there is very little incentive for farmers to reinvest and to just invest generally in their farms. The costs are so high, they take on all the risks, all the risks. And so that's really what we also are focussing on a lot. So, we have this IDH living income roadmap. We had recently this living income summit, that goes beyond cocoa. And I think the number one message is really about how do we redistribute value and risk across the supply chain. Because right now, the way that the landscape and the environment is: living income is just a word, right? But if you don't redistribute the risk, the value, then there's just no way that farmers can actually reach a living income no matter how much you invest, no matter how much you focus on productivity, service, delivery, even price.

NZ So actually kind of the main conclusion is the holistic approach that is needed and on all aspects that needs to be looked at to get to that living income?

GL Absolutely. A combination of interventions and also trading arrangements, practises in order to redistribute value and risks. Because too much of the costs and risks are at the level of the farmers. Not at the level of the companies or the government.

NZ And how can we get there? To redistribute...

GL Share the costs. Everyone needs to pay. Everyone needs to pay more in order to share the costs. So farmers earning a living income has a cost and that needs to be shared by everyone. And that's really... We're not going to reach living income of cocoa farmers if we stay the way we are. And if we stay in the system, that benefits, some and not others.

NZ So now we went through the activities. Is there anything more you would like to share about what's happening in the cocoa sector and the implications of that on the living income gap?

GL I think I've covered pretty much most of the issues.

NZ And there's a lot. That's good to know. And then following up on that, what are external factors that are influencing the income of these smaller cocoa farmers in Ghana?

NZ So what I was mentioning, there is just a market where the value not distributed equally. So basically how the markets are set. How the sourcing takes place. It's just, the whole market system is quite unequal. And that's why we're in a situation where we're actually working on trying to get almost 2 million farmers to even just reach a decent living income, which is really very basic. That shouldn't even be our horizon. That should be the minimum. So I think it's just this unequal distribution of value, which is affecting the fact that living income isn't a reality for most farmers.

NZ Is there anything else you would like to share on my questions, on the topic?

GL Yeah, I think there is actually one thing that is important. When we talk about farmers in cocoa and whether it's Cote d'Ivoire, Ghana, somewhere else. We were talking about the farmers, basically those that are trading their cocoa and who get money from it. But the fact is, particularly when we look at living income, we're not looking at a worker getting paid only. We're looking at the whole household that has worked towards that cocoa but is invisible. So here I'm talking about the woman particularly and gender and the fact that, I think, an important opportunity that we have with living income and the whole thinking of living income is that we need to look at the profitability of the household and not just the farmer and the fact that women basically are involved in 50% of the work around cocoa and the labour, etc., But 5%.... In Ghana, it's a little bit more I think, it's about 15%. But in Cote d'Ivoire, it's 5% that are represented in co-ops. So they're very much unrecognised, unrewarded and informal. A key aspect for me and I think a lot of companies and government also have recognised this, is really to facilitate women's engagement, empowerment in being able to be financially independent. Not just financially independent, also aside from that, but to actually have the resources and be recognised in the formal economy. So that's one aspect I would also highlight.

5.4 Interview mister Kwapong-Akuffo, GIZ, 01/08/2022

NZ My thesis is about cocoa specifically and about the living income challenge, of course. Which stakeholders do you think are most important when tackling this challenge and why?

KA So this would be country specific and value chain specific. So we're talking about cocoa. But let me also mention that, this project we are talking about, the Living Income and Tree Crops project. We're talking about the two value chains, with two crops, cocoa and cashew. But since we're just talking about cocoa, I will try to limit the discussion to cocoa. So if we are talking about the stakeholders for cocoa, with the way the cocoa system is set up, we work with the main regulatory body which is the Ghana Cocoa Board. They control all the affairs of cocoa, from production practices and techniques of the farmers, to supplying inputs, to selling and the marketing of cocoa beans- all are regulated by this national body called the COCOBOD. So essentially, I say they would be the biggest stakeholder required to know in this sector. But then additionally, you could have some others, like people from academia or from universities, you could have civil societies, you could have a couple of other people; farmers, most importantly. But the biggest player in the sector would be the COCOBOD.

NZ And you said that's when only looking at cocoa, but the initiative is also with cashew. How are you exactly working on combining those supply chains?

KA ComCashew is originally a cashew project. So that being said, we already have the liaison with the national partner who is responsible for the cashew sector in Ghana. In this case, this is the Ministry of Food and Agriculture, which is abbreviated as MOFA. So ideally, we have a structure set up with this personnel already, for all of our interventions. And so including cocoa to our original cashew framework wasn't so difficult, because for one, both tree crops are cultivated in the country. And also interestingly, you would find cashew cultivation in the middle to Northern part of the country and cocoa more towards the southern part of Ghana. So because of the strong inter-governmental network, mainly the MOFA as a partner and a couple of other partners within COCOBOD that facilitated this dual value chain approach. And it also served as an opportunity to bring up cashew as arguably, an "emerging crop". But that (the situation of cashew being an emerging crop) is gradually changing because it's not as it was before. So, this was, or let me say, is the idea behind combining these two value chains for this approach.

NZ What is the relationship between your organisation and the smallholder cocoa farmers in Ghana? Are you in direct contact with them?

KA We work mostly through the national partner to implement whatever intervention it is. So for instance, in the case of cocoa, if we want to do some activities like trainings on some good agricultural practises, we present this to the Cocobod. So there's a specific department called the Cocoa Health and Extension Division, which would normally be concerned on training on good production techniques and all of that. So ideally, this department of the COCOBOD, which is called CHED (Cocoa Health and Extension Division), would provide us with some sampled farmers we could work with. Most of the interventions would be done through the partner and we could have access to the farmers if we want to do some kind of monitoring or some kind of assessment of the interventions being carried out. But mostly the contact is between this partner since they are the national partner who know the farmers best. So GIZ doesn't want to take over the role of the national partner in this case. We are just more of collaborating with them.

NZ Which interventions are you specifically involved with regarding closing the living income gap for the smaller cocoa farmers?

KA So interventions. It cuts across, actually. We can look at the production level, we can look at supply, there's a business linkage level. What else can we look at? You know, as we go on.... I think my thoughts will come back to me. I think at the moment, the production and supply chain. I'm sure more will come up along the way. So pardon me for that.

NZ What are the main challenges and risks that you encounter when trying to increase the income of the smaller cocoa farmers?

KA So this Living Income and Tree Crops project began in 2019 and that officially ended at the end of 2021. So obviously, you can tell this was in the COVID phase. First of all, even before the lockdown started, having access to the farmers was one thing. Having the activities carried out according to the timelines was also another. Also with the way Ghana's cocoa system is structured with the COCOBOD, it's a very political atmosphere. So it has to be handled with some kind of diplomacy in order not to deviate from the norms, the focus and priorities of the COCOBOD. So those are a couple of risks that come up that need to be managed well, so they can be diplomatically manoeuvred properly.

NZ You already mentioned that you are involved in quite some of the interventions. For my thesis, I'm dividing the interventions into eight activities in the sector, which you can see here on the screen. Which one are you involved with in the project? So you've already mentioned production.

KA I should also mention, as I think I didn't mention it in the beginning. So this Living Income & Tree Crops project was between GIZ, Fairtrade and REWE, that's a German retailer. So these are the external guys and then the government of Ghana. So just to frame the discussion a bit. So with what we have on the screen, let's see. Our sector is involved in I would say, production, more with CHED, which is the department of the COCOBOD I already mentioned. Value chain development, I'd say as well. Service provision. I think Fairtrade did something with service provision, so not GIZ- that was a Fair Trade component. Consumption, also Fair Trade and REWE because there was this segregated supply chain of cocoa beans to the German retailer with which they used to produce the "Very Fair" chocolate. Stakeholder organisation, not mainly GIZ. Regulation, not so much. Coordination... Coordination with all of these actors. So GIZ played a role with that. So yes, I'd say coordination. Investment, obviously there was some financial support of this. So, yes.

NZ Okay.

KA I don't know if you were able to catch all of that? It was a bit jumbled up.

NZ I have it all. And I also recorded it so I can listen it back if needed. So regarding production, what did GIZ do in the projects to close living income gap?

KA So, based on the sectors I've mentioned so far. The idea was to have a holistic approach where we don't just look at one thing, we try to combine as many as possible. We have a concerted approach and a concerted effort through this national partner, the COCOBOD and specifically the department that I talked about, CHED. We implemented some training on good agricultural practises. When I say good agricultural practices (GAPs), previously you could find that some farmers who were not following the recommended farming practices, would not do some standard practises which we would assume

should be known. But then, you find in some cases that these are not done. So then there is a need for these trainings on how to perform these agricultural practises in the right way. So then we implement trainings on these GAPs. Additionally, we had trainings on the group system. So again, at least for cocoa, a couple of the cocoa farmers in Ghana, are in groups. And these classifications of the aggregation of farmers will be interchanged quite often with the terms- farmer groups, cooperative and unions. So the discussion sometimes interchanges the correct terminology, but so for the lack of a better way, I will say farmer groups. So there were a couple of trainings on the essence of the farmers being in these groups. The kind of benefits you can get from bulk sale of produce amongst others. Again, trainings on Farmer Business School, an approach developed by GIZ to strengthen farmers as entrepreneurs. So ideally this would involve a cut-across of the whole cocoa production system from the production phase to semi-processing the cocoa all the way to group dynamics that also cover the benefits of being in groups, the benefits of saving, access to finance etc. So I don't know if you're familiar with the FBS approach, which has all the essentials of being a good cocoa farmer in the FBS curriculum. That's what's also incorporated as a training for the farmers. Additionally, we could talk about other income generating activities; the cultivation of other crops besides the main cocoa tree crop, eg, planting cassava, maize... We call these side-crops. Trainings on pruning, artificial pollination, disease and pest management.

NZ What are the implications of these interventions on the income of the farmers?

KA So the implications on the income... So if we look at, for example, the other income generating activities, besides the main cocoa beans that they would sell, it's obvious- income. You (the farmer) would have the opportunity to also either sell or eat i.e. consume these side crops by himself/herself or his/her family. For example, plantains, which are very commonly grown with cocoa, cassava, the beans, some animal rearing and others. In an effort to achieve the living income... So in this case, not necessarily focussing on the price mechanism, but other activities that could eventually build up to the farmer raising their level of income to get to the level of a living income, ideally.

Additionally, another implication would be the year-on-year increase in production, like we see with the cooperative of the Fanteakwa union, with whom we worked.

NZ What challenges are encountered in the process?

KA Like I mentioned in the beginning, obviously Covid interfered with a couple of activities. Some of the farmers could not be reached in a timely manner. Nothing else pops up at the moment.

NZ And what are opportunities regarding production to close the living income gap?

KA Sorry, let me go back to the challenges. I just remembered something.

NZ Okay sure.

KA The way cocoa is set up in Ghana, again, is, there's a de-segregated system where everything runs through the COCOBOD. For example, the farmer sells their cocoa beans and at the point of sale, it all goes through the COCOBOD system. So obviously there was a challenge in having a segregated value chain for just this REWE product. This segregated value chain is quite different from what COCOBOD would normally do. So then we had to have a specialised format where once the beans are aggregated by the farmer, it's not bulked again. It does not join the beans from the cocoa farmers from everywhere

within the district or within the region. So we had to do this segregated agreement up until the point where it got to the ports. So we could actually trace that this bag of beans, this shipment of beans is actually coming from the farmers from the specific cooperative. So that was a bit of a challenge in the beginning.

NZ Any other challenges?

KA For now these two would stand out for me.

NZ And then which opportunities can you identify regarding production to close living income gap?

KA We wouldn't want the approach of getting farmers to obtain a living income to only be that they produce more, to have more money or to produce a lot of other stuff. The discussion should be a wider discussion of, for example, the price. So that part of the approach should be talked about too. On the production side, increasing production and quality and having other income generating activities are just an add-on. We wouldn't say that should be a focus because it actually isn't the focus. The focus should be more on the price. Once a good price is set, the farmer should be able to attain the living income by selling his beans at this price. And then, if there are other activities that the farmer decides to do, this just comes in as some additional income for the farmer.

NZ And then moving on to value chain developments. What does GIZ do regarding value chain developments to help these smallholder cocoa farmers?

KA. Like I mentioned, initially the project was centred on cocoa and cashew. So I'd say for value chain development.... I'd say more cashew. Because for cocoa in Ghana, the value chain is quite well structured. I don't think there's so much more that can be done. But on the cashew side.... So again, these are two tree crops, cocoa and cashew. So if you compare the systems, then the cocoa system is very developed, very structured. It's quite the opposite for cashew. So it's very largely unregulated, unstructured with a lot of free trade with external people coming in and seasonally buying and they leave when the season is over and all of that. So thinking on it now again I'll say that value chain developments happened more with cashew than with cocoa actually. Just thinking of it now.

NZ And before you said there should be more focus on price for cocoa. How can we ensure that there's a good enough price for the cocoa for the farmers?

KA Very, very good question. This is a big international discussion happening currently. I don't know if you follow the EU discussions of it, but it's a very interesting situation at the moment. A lot of parties determine the final price, the world market price of a ton of cocoa, for example. So these discussions ideally are being held on the national level, meaning the national producing countries, the importing countries, Europe, North America and all the other places. So it's a very high level political discussion and that's the level it is normally held at. And for West Africa, we have this new Cote d'Ivoire-Ghana Cocoa Initiative. So that would be one of the political mouthpieces for the farmer in order to drive the discussion further at least on the part of the producing countries. So I'll end with.... for price it's a very volatile topic. And so as GIZ, I would say, our focus is again on improving the livelihoods of the farmers we work with. In this case, mostly smallholder cocoa farmers.

NZ So it's a tough question. And how is GIZ trying to influence this process? Or do you even?

KA Let me move this to the project I'm currently working on, that's the Sustainable Cocoa Initiative Support Programme, which has just started. Ideally, this programme would pick up the living income and the farmer strengthening components of the Living Income & Tree Crops project, which already ended. So through this new project, we will support the EU flagship on sustainable cocoa and we intend to support the Cote d'Ivoire-Ghana Cocoa Initiative in their measures for a better income of farmers. In the EU Sustainable Cocoa Initiative, there are multi-stakeholder working groups, who will break down the policy intentions into concrete actions. It is important that – beside the public and the private sector – the farmers and the civil society are adequately represented in those discussions. This is one field of possible actions that we see. At the same time, we are interested in looking at the influence of certification systems and quality on the income of farmers. And last but not least, it is necessary to convince the private sector to invest more for a correct income of cocoa producers. The upcoming EU Human Rights and Environmental Due Diligence (HREDD) regulations are an entry point to see, how the private sector could best align.

In fact, we already support the Cocobod in the roll-out of the national Cocoa Management System (CMS), which shall provide traceability from the farm to the port. This is one of the preconditions to ensure the further trade with the EU. One of our concerns there is the interoperability of several public and private systems. A consensus needs to be found. So those are some aspects that we could work on.

NZ And so you said the value chain development is mostly related to maybe the cashew side of this, because the cocoa is very set with the Cocobod, etc.. So I think we can move on a little bit from this. You said you're also involved with stakeholder organisation. What does GIZ do regarding this?

KA That's again a playback on the initial point I made on the training on group dynamics, FBS (farmer business school) and those kinds of trainings. So that is focussing on the farmer, farmer group, cooperative or whatever you want to call it. We want the farmers to be able to make decisions on their own. For example, the farm gate price, it's set by the Producer Price Review Committee (PPRC) comprising the Cocobod, private sector, and 2 representatives of the farmers. So, the question is how much influence these farmer representatives have on the fixing of the farm gate price of cocoa. Here, we could as well see, how we can support the farmers in these negotiations.

But then, we are looking at other aspects such as the farmer group in itself. Are they already able to adequately manage their own finances, a proper record keeping, proper account and proper financial requirements to the point where they can access loans from micro-finance institutes? The Farmers Business School and the Cooperatives Business School helps them understand financial transactions and become more financially autonomous. This farmer group or co-operative is actually a business and functions as a business. They can have the same benefits and opportunities as a regular business. That's one angle we could have on the stakeholder organisation with a focus on the farmers.

NZ What are the implications of this?

KA Well, the idea is that once these trainings are carried out, the farmers would start thinking and acting like an entrepreneur. So, we expect them to develop a good leadership structure to be able to negotiate or manage the affairs of the farmer group or cooperative. The access to finance would open the doors to all sorts of instruments and services that I talked about.

NZ And what are challenges that are encountered?

KA One obvious challenge that would stand out to me, the fact that not all farmers are on the same literacy level or on the same organisational level. You could have some farmer groups where they are super structured, organized... Some may even have an accountant. Some have really nicely set up structures with a corporative leadership, secretary. I mean, all of these provisions you normally find in a structured company. On the other hand, you can find some not-so-well structured farmer groups. And this is a challenge for GIZ, as well, not to neglect these unstructured farmer groups. Well-organized farmer groups are attractive to whoever wants to work with them. But in the long-run it makes more sense for a balanced development to integrate specifically the marginalised groups instead of leaving them behind. So it's usually a difficult situation, even for other partners besides GIZ. As I said, that's the trade-off between working with groups that are already established and working with groups that are not so established. Are they willing to bring them up to a particular level that they could be able to work and do as they should. So those are some of the challenges associated with this system.

NZ And do you think that all the farmers are somewhat organised? Because you said some of the organisations are less structured, so harder to work with. But I can imagine that maybe even some farmers are not in an organisation at all.

KA That is a reality. Some farmers are in several cooperatives, some in none, some are in informal groups not registered with the authorities. The Cocoa Health and Extension Division wants to get an update on that. It all comes down to the point where, it's a choice. You can't make someone do something they don't want to do. They can be out of this cooperative for individual peculiar reasons.

NZ And what opportunities are there regarding stakeholder organisation?

KA It would very much play into what I've mentioned previously. The opportunity being that the system must be able to bring at least a representative number of the cocoa farmers in Ghana to a good level. That obviously would be a good opportunity for other players to come in and work with. For example, REWE is working with the Fanteakwa Union. For the private sector players who require a standardized quality, it is necessary to cooperate with reliable organisations. A well-trained and well-structured organisation will reduce the risk for private companies as well. They should be interested in playing their part in the upgrading of farmers and some have already proven their interest by running private sustainability programs.

NZ What risks to these companies have normally?

KA If you talk about the farmer group not being well established. One risk would be that working with a group that is not so structured, they might not have good accountant services etc. So they might not be able to tell you how much cocoa beans the group was able to collect in the past season. They might not be able to tell you how much they made in profits, how much they made in losses. Standard accounts and requirements that you would want to look at before engaging with anybody in any business. And a further concern would be the required standardized quality and the compliance with existing rules and regulations – like deforestation and child labour.

NZ Any other comments related to stakeholder organisation?

KA Off the top of my head, not at the moment.

NZ You also said that you are working on coordination. What do you do regarding that?

KA In this case I say coordination is more amongst the partners who were involved in this Living Income and Tree Crops project. So like I mentioned, we had Fairtrade, we had GIZ, we had REWE and we had the national partner Cocobod. And on the one angle, there was a need to set up the segregated supply chain where we could be able to trace the cocoa beans to this one type of cooperative. So that required some level of coordination on their respective processes. Discussing solutions with Cocobod and Fairtrade/REWE how to modify the systems to get the beans to the port in a traceable way. As GIZ, we were facilitating the discussions on common solutions.

NZ And what implications did that this have on the smallholder cocoa farmers?

KA The farmers profited from the direct payment of the Fairtrade premiums, which was directly paid to them. In addition, the Living Income Differential of four hundred dollars per ton was also paid by the COCOBOD, in addition to the farmgate price. So what I find mostly beneficial to them is, they were paid these additional incentives. And you know, most of the challenges were with us, trying to make this system to work.

NZ And what specific challenges were that?

KA Like I mentioned, it was setting up this segregated supply chain, because it differed from the usual Cocobod practice.

NZ Which opportunities can you identify regarding the coordination?

KA So on that it would again link to the previous submission that based on this prior relationship, it sets a good ground to continue this collaboration, I mean scale it up with other companies who might want to be involved. At the moment this happened with the German retailer REWE. So this creates a good opportunity. We have a model, we say okay, this works. So if someone, or another company is interested in having something like this, we could explore the possibilities with that. So the opportunity is, we have a model that works and then it's open to be improved and to be upscaled.

NZ Anything else related to coordination?

KA Not much regarding coordination.

NZ And the last one was investment, that you said GIZ was related to. What does GIZ do regarding investments to close the living income gap?

KA Let me take it back to consumption because I think I skipped that part in the beginning.

NZ Yes, we can do that.

KA So this sourcing of the cocoa beans from this Fanteakwa union, like I mentioned, was used to produce the Very Fair chocolate in Germany. So then all of this was handled with the REWE group and Fairtrade. I think that this created a good opportunity to have sustainably sourced cocoa beans, traceable up until the point of the cooperative of the Fanteakwa Union. The terminologies are often interchanged so pardon me, if I keep interchanging them from time to time, cooperative and farmer group. But then on the consumer side, this even creates a bigger opportunity to open up the discussion on even a larger scale as to the preferences of the consumer. What is the consumer looking at? Is the consumer looking at just the fact that it can be traced to a particular cooperative? Or is the consumer looking at other things, like the farmers who produce the beans should have a living income, is it free

of deforestation, child labour and stuff that is in the news lately. Then it opens up a larger discussion. That's good for these issues to be addressed; child labour, deforestation etc.

NZ So that was regarding consumption than?

KA Yes

NZ What challenges are encountered in this?

KA REWE will most likely be able to talk much about the challenges on the consumption side because they are producing the Very Fair chocolate. So they could speak more on that as I think that goes out of the boundaries of collaboration on the Living Income and Tree Crops project at the moment.

NZ And then moving on to investments. What does GIZ do regarding investment?

KA Like I mentioned at the beginning, this collaboration was with Cocobod, to support them to carry out these trainings with the farmer groups. Trainings, like I mentioned, on FBS, on good agricultural practise, on additional income generating activities. So essentially we supported the national partner, Cocobod, in this regard to carry out these activities or interventions. So there was an investment of financial support and technical expertise and advice.

NZ And what are the implications of this on the smallholder cocoa farmers?

KA There was a high impact for the farmers. They profited in developing their capacities with trainings on FBS, good agricultural practices, additional income sources and saving schemes for free. With this, they enhanced their productivity year after year, they improved their incomes, and they even executed social programmes in the communities.

NZ And were you able to reach a lot of farmers with this trainings, or was it more specific to a certain group?

KA So this Living Income and Tree Crops project looked at six cocoa cooperatives and six cashew cooperatives. Six cooperatives for cocoa specifically that covered multiple regions. So CHED provided us with these farmer groups to work with. So this isn't the entirety of all the cocoa farmers in the country, obviously. But as this was a pilot, these are the groups we started with.

NZ So it's going to be established broader later, as it is a pilot?

KA Yes. So the Living Income and Tree Crops project has ended. But then some components will be taken up and into this new EU Sustainable Cocoa Initiative Support Programme. I'm more working on this currently. It is intended to continue the cooperation with Fanteakwa, Rewe, Cocobod, and Fairtrade.

NZ And what challenges are encountered in these programmes?

KA Looking at the initial study I shared, the baseline study, that essentially took place at a time when COVID had really struck and there were a series of lockdowns. So even the data collection or the interviews with the farmers of that time, around 2020, there was a bit of a challenge because obviously with the lockdown in-country, we were not able to go to go to certain places. But thinks worked out, the data was collected and the study was published. But also a major challenge was that mobility to

these farmers as well as again with the COVID, the interfering with the timelines of the project's activities. These were the main challenges. Looking out at broader fronts with global ports being directly restricted or closed for a time, this also affected the supply of the products of the cocoa beans to the importing countries. So we had instances where produce was being held at the ports because there was a whole global logistics issue with products leaving countries and being brought in to countries here. So that was also a challenge that affected us.

NZ And what challenges do you see for the future?

KA It comes back to the price because one way or the other the fact still remains that a majority of the cocoa farmers are not earning a living income. That's already a challenge. Not being able to have enough money to provide for your household, for your essential needs. That would obviously bring about other problems. Which again would stem into just not being able to have enough money to live a decent life like anyone else should. So that's one challenge that could easily roll over into a series of other challenges that could be quite small, and they could be quite huge, to say the least.

NZ And what opportunities can you identify?

KA This collaboration. So opportunities being this living income project that's already closed. Like I said, GIZ has provided a model that says, this works. But then I think the discussion needs to be taken up larger on where there should be a shift from doing a pilot to actually have long term sustainability programmes, mainly by the stakeholders who deal with the cocoa and its derivatives; chocolates, sweets and whatever. There has to be a larger discussion as to how long should this pilot continue and at what point would there be solid, long term programmes that would, in the long run, be beneficial to the farmers and not just a hit and run approach.

NZ So more long term projects, that have a long term impact?

KA Exactly.

NZ And in general, when looking at a living income challenge, what do you think is really needed to get to these living incomes?

KA That could also be a very big discussion. You can look at price, production, and a couple of others. Production will actually be a tricky answer because with your background in economics, I'm sure you can relate to oversupply. The dynamics of demand and supply. If there is an excess in produce, the demand would fall, the price would eventually fall. I mean all these instruments one way or the other play into the farmer achieving a living income. A good price should be set. And another activity, recently there's mention of substitutes for cocoa. I don't really remember the article but, there is a Dutch or German company, they are looking to have a substitute for the actual cocoa beans. So that puts some kind of tension on the cocoa farmer. If the demand for beans being used at this point could go extinct in a couple of years, where does the farmer stand? So it's also a play on these themes. What is the bigger picture, what is the gain in the end? And how much are we expecting the farmers to do and how much are we expecting to compensate them for the amount of requirements we are placing on them? So it's a very large discussion, which I don't think can be adequately dissected within the time we have at the moment, unfortunately.

NZ What external factors are influencing the income of smallholder cocoa farmers in Ghana?

KA Based on the question, you mentioned smallholder farmers. So obviously these cocoa farmers don't have large plantations. Most of the cocoa farmers in Ghana are small scale, on less than five acres. Obviously the farmer doesn't already get a lot from the little he produces. So that's one challenges, that the farm sizes are not huge. Which also stems into the land tenure system in Ghana which is very, very complicated. And also having land even just to farm, it's very complicated. Which might also be the case in other countries.

5.5 Interview Hammond Mensah, Solidaridad West-Africa, 02/08/2022

NZ Which stakeholders do you think are most important when trying to tackle the living income challenge and why?

HM So there are a number of them. So the regulator is one. They play a key role in living incomes in Ghana and Cote D'Ivoire. For example, the regulators have instituted what is known as a Living Income Differential, for each ton of cocoa beans that is bought the buyer is expected or required to pay \$400 on each ton of cocoa beans. Now that \$400 goes to the smallholder farmer on top of the farm gate price. So if the farm gate price is, let's say \$1,800, then the farmer would get an extra \$400, to top up. So that's from the regulator side. From the side of the traders or those who buy cocoa beans on behalf of manufacturers. In collaboration with the manufacturers they also have the various sustainability programmes that they run in their supply chains. So for example, a chocolate manufacturer would have a sustainability programme where it supports cocoa farmers in its supply chain with income diversification, crop diversification, climate resilience and things like that. All of those things are aimed towards closing the income gap for the farmer. And then we have certification bodies like Fair Trade, like UTZ, like Rainforest Alliance. So once you come under their certification, then buyers are expected to the farmer a premium for the farmers following a certain protocol in doing their production. So the premiums also count towards closing or improving the incomes of the farmers. Then we have other manufacturers, apart from the chocolate manufacturers and so we have other manufacturers. Recently there is this trend where through innovations, companies are looking at what else can be produced using cocoa by-products or cocoa co-products. So there are two companies that are looking at the juice that comes out of the fermentation process. So they colour the juice, they pasteurise and they bottle it and they sell it to use as food supplements. So the farmers do not only sell to farmers who participate in that business, do not only sell their cocoa beans, they also sell the juice that they collect as part of this fermentation process. In the past, they either drank it themselves or they threw it away. But now able to sell it.

NZ Which two companies are those? You said there were two, right?

HM There's KOA.

NZ Yes, I've heard of it.

HM And there's Kumasi Juice. So these are two companies. And then we are also seeing what we call Fair Ownership Models. So the Fair Ownership Model is where the cocoa farmers in a manufacture supply chain, own shares in the manufacturers business. So there's a company in Ghana called Fair Afric. I think it's a German company. [...] cocoa beans to Fair Afric also own shares in South Africa. So they are not just suppliers. They are also part owners of the business.

NZ The farmers?

HM Yes. So their income doesn't only come from selling cocoa beans. It also comes from maybe dividends, capital gains, etc., that they would get as a result of the ownership in the business. So we are seeing situations where manufacturers are using Fair Ownership Models to also improve the incomes of the farmers. Then there is the Living Income Community of Practise and what they do is do a lot of research and they publish this living income reference prices that organisations who are desirous of closing the income gap can use as a benchmark. And then we have academic institutions

also doing research on how to improve the incomes of cocoa farmers. So these are some of these stakeholders that you can consider when you talk about closing the income gap for farmers.

NZ And as Solidaridad West Africa. What is your relationship with the smallholder cocoa farmers in Ghana?

HM So in Ghana, we implement various donor programmes targeted at cocoa farmers. There was one that we closed last week known as a Cocoa Rehabilitation and Intensification programme. We started implementing the Cocoa Rehabilitation and Intensification programme in 2013 and it was implemented in two phases. The first phase was between 2013 and 2017 September. And the objective was to prove that it was possible to provide commercial services to cocoa farmers. And by doing that improving the yields and consequently the household incomes. So have improved in the business case for commercial service provision during the first phase. The second phase lasted between November 2017 and December of 2021, where we scaled up service provision. So we identified various entrepreneurs who were interested in setting up service provision companies in the cocoa landscape. So they can provide commercial services to the cocoa farmers. So the objective was not only to improve their yields and consequently or subsequently the incomes of the cocoa farmers. It was also to ensure that cocoa production is done properly. So these service providers would employ all the climate smart protocols. They would not use child labour. And then they would ensure that cocoa production is done in a way that it ought to be done, so that farmers will also benefit for what they do when the harvest comes in. So these are the two objectives or the two reasons why we have the, what we call the rural service centres in Ghana. So in terms of relationship, our relationship has been working with the cocoa farmers either directly or through these service providers to ensure that they are producing cocoa responsibly and that they are also getting fair remuneration for the cocoa that they produce.

NZ And the service providers, are they then part of a farmer corporation or are they a separate body?

HM They are largely a separate body. We have also seen a situation where the farmer cooperative has decided that, okay, we also want to set up a separate body to provide services to our farmers, the farmers who are members. So we've also seen situations where farmer cooperatives set up some of these service providers, but usually or largely they are separate bodies. So that's one, that's the *current*. And then we also implemented the MASO. So MASO was the Youth and Cocoa Programme and it was to resolve two issues. One was creating employment opportunities for young men and women in cocoa growing communities, because if they get employment, they get income and then it counts towards improving the household incomes. So the first objective was to create employment opportunities for them. And usually these are young men and women who have dropped out of school and therefore unable to progress and still live in the communities. And then the second objective was to ensure succession in the cocoa landscape. So cocoa farmers are old or they are getting old. Their children are not interested in cocoa farming. Over time, we might get to the point where cocoa farmers are too old to produce cocoa and therefore the sustainability of the crop will be threatened. So how do we ensure that we get the young men and women also interested so they can take over when their parents become old? So these are the two key objective. For the MASO problem, it was funded by the MasterCard Foundation, through the Dutch government. So these are the two major programmes that we have in Ghana.

NZ So those are two main projects and are there any other things Solidaridad is doing to close the living income gap in Ghana, or are those two main things?

HM So we are also working with Kumasi Juice, one of the companies that is processing the fermented cocoa juice and bottling it and selling it in Europe. So we are working with them. We've discussed Fair Ownership Models with them so that the cocoa farmers are not only supplying that juice to them, but the cocoa farmers also own a part of the Kumasi Juice business. So we've concluded a discussion with them on possible options for a Fair Ownership Model. We're currently working with them to mobilise the farmers in their supply chain into savings groups so that these farmers can get access to credit that they can use in producing cocoa responsibly. So it's a small project that is currently being funded by the RVO in the Netherlands. And this is the other programme that is implemented. There are other small programmes that we've implemented. So for example, there is a cocoa company called Sucden. So we are also mobilising the farmers within the supply chain of Sucden into savings groups so that they can get credits to finance responsible cocoa production. We are providing similar service to companies like Mars, the chocolate company, and Mondelez. And we are working with mobilising their farmers savings group, training them in alternative income generating activities so they can close the income gap. We call them diversification. So we are also training them in income diversification activities and also training them in climate resilient activities. So these are the other programmes that we are implementing.

NZ What are the main implications of these programmes on the smallholder cocoa farmer to Ghana?

HM Well, we have seen the we have seen an improvement in their yields. Obviously, we do not control the prices. The price is usually set by the government. So even if you maintained the prices at a constant level. We have seen an improvement in their yields and therefore that would lead to an improvement in the household income and hopefully it will lead to closing the income gap that they experience. And I say hopefully because farmers are paid in local currency and so you would have to adjust for inflation to arrive at the point where you can see conclusively that the increment in yield, even if you hold the prices constant, has resulted in closing the income gap for them. So that's the implication. But the household income for the farmers. But production protocols are responsible for the farmers. Reduced deforestation and elimination of child labour and things like that.

NZ So the main focus is a bit on the increasing of yields or am I saying that incorrectly?

HM No the main focus is transitioning the farmers out of poverty. A combination of factors must come together for that to happen. And two of the of the leading indicators or two of the leading factors are the volumes of cocoa that they produce and the price per kilo. So if you take the volume of cocoa that they produce, that is something that we as Solidaridad can control. And that is assuming that we can control for the weather and things like that. So we can help them to improve or to enhance the volume of cocoa that produce on the same piece of land. So we also do not do X. So interventions are not expansive. So we do not say, okay, we will increase the size of your farm so that you can get more cocoa beans. No, we don't do that. So what we say is that on the same piece of land, you can produce more cocoa. So our focus is on productivity. And so once we help them to improve on the quantity of beans that they produce and the government sets the price, then the combination of these two focus will lead to better household incomes. So the objective for us is to transition them out of poverty. But we know that the key factors. One of them we control, the other one we don't control. And the one

that we control is the volume of cocoa beans. The one that we do not control is the price, which is said by the government.

NZ And what are the main challenges that are encountered in these projects and interventions?

HM So one of the key ones is climate. So we were out there in the field visiting the farmers with the Dutch ambassador a couple of months ago. And the key challenge was the impact of climate. Because once the rains do not come, or even if they come, then they come in small quantities or they come at the wrong time. It will affect their production. If it affects their production, what it means is that they have fewer cocoa beans to sell and even if they have fewer cocoa beans to sell, it will affect the level of income that the households get. So for them, the key thing is climate. And so any intervention going forward must factor in a strong irrigation component so that they are able to deal with the impact of climate.

NZ And any other challenges?

HM Yes, the other challenge is access to land. So especially when you take the woman. Even if in institutions where the woman can't get access to land, the woman has to be led by a male counterpart. So a male counterpart will have to lead the woman to the land owner, before the woman would get the land. So access to land, especially for women and also for the youth, is also a key challenge. If they don't have land, they are unable to participate in these things. And also the other thing is decision making, decision making on how the income that flows from cocoa sale is utilised. So usually in the household where there is a male counterparts, most the man usually would make the decision with respect to how the household income is utilised. To address that we implemented a programme in the Cote d'Ivoire known as a couples seminar. Where the man, the spouse and the children are trained on how to take decisions with respect to the utilisation of household income together, so that it is not just the man taking the decision. That decision is taken by the man and the woman and also the children. And we have seen that if that happens, usually that there is a lot of efficiency in how the household income is utilised. So another challenge is decision-making when it comes to how household income is utilised. Sometimes also decision making and when it comes to who participates in training programmes and so on. So in the communities, for example. Because a woman also do other activities like taking care of the children, and cleaning and washing and cooking and things like that. Usually they do not have enough time to participate in training programmes. So again, there has been discussions at the household level to see how the children and the male counterparts can support the woman in carrying out these household activities so that they can also get some time to participate in training programmes. Especially when it comes to training programmes on climate smart production and also financial literacy. We think that other members of the household must support the woman, so she can also have time to participate in some of these training activities. So these are some of the other issues. And then there also the issue of tree rights. So cocoa trees love shade. So if you plant cocoa trees, you must also plant other tree species that will provide shade to the cocoa tree. And usually they would include timber trees. And the law in Ghana is not very clear as to how the farmers who plant the trees can own the trees and also have as the trees and sell them so that they can use the income from the sale of the trees to support the household. So that is not very clear. As a result of that, farmers are not too motivated to participate in tree planting. And we know that tree planting is very key when it comes to resolving the issues of deforestation and climate and things like that. So that is another issue in the cocoa landscape.

NZ How are you as Solidaridad dealing with these issues and challenges? How are you playing into them?

HM So I mentioned one of them, the couple seminar which where we train the man and the woman and their children on how to take decisions together and how to also ensure that the other household members are supporting the woman so she can also have some time to participate in training activities. In the issue of land we have worked with the community in the Western parts of Ghana where we have had discussions with the chiefs. So that land owners... So here's the thing, if you lease land from someone and you plant cocoa trees on it, and the cocoa trees have come to the end of their productive life. And you have plant new trees. As soon as you cut the old trees, the land reverts to the land owner. So that has become a disincentive for people to renovate their farms. So we had a programme also funded by the Dutch government known as Advocacy for Change, where we worked with land owners, chiefs and community members to resolve that issue. So that farmers who cut the old trees to plant new ones, do not lose their land. So I had a programme to resolve that as well. On the tree rights. We've published research on how we think that the law ought to be amended to create room or to bring transparency into the tree rights issues, so that farmers are motivated to plant trees. Because they know that they would benefit from these trees. What else did I mention as the issue? So on all the issues that I have mentioned, we have intervened in addressing them and some of them I've mentioned. So if there's any one... I'm not writing. So if there's anything I said which I have not spoken to, please bring it up.

NZ I think you already mentioned quite a few, but which opportunities can you identify to reach that living income for these smallholder cocoa farmers?

HM So the opportunities, like I said, are what the various stakeholders are doing. So one is their Living Income Differential, which is being promoted by the regulators in Ghana and Cote D'Ivoire. And then there is what the chocolate manufacturers and their traders are doing, supporting farmers to diversify their income streams and also to build resilience against climate. Certification bodies and the premiums that they provide opportunities for premiums that they provide to cocoa farmers. Other manufacturers like KOA and Kumasi Juice, who are taking the cocoa juice and commercialising it so that the cocoa farmers do not throw away the juice like they used to do, but then they can sell it and make some money. That is also Fair Afric, which is leading the charge on fair ownership, where cocoa farmers own part of the processing business. And there's the Living Income Community of Practise doing research to support all our efforts. So all of these things, I believe, are things that are aimed towards closing the income gap for the farmers. And, of course, what Solidaridad is doing, which is productivity, enhancing productivity at the farm level so that farmers are able to produce more cocoa beans on the same piece of land. So all of these things come together to ensure that cocoa farmers get a better price. In recent times, there's been discussions about fair prices. So there is a call on those who buy and process cocoa beans into confectionery and also beauty products to pay a fair price for the cocoa beans that they buy. As to what a fair price is, it is still under discussion. So once we support with improving the productivity and the price is fair, we are confident that in combination with all the other interventions that have been made, would help in closing the income gap significantly for cocoa farmers.

NZ So for my thesis, I have decided all the activities form the interventions into eight different categories. So I'm going to share my screen. Yes. Okay. So on the screen you see the eight sector

activities I've divided them into and you've already mentioned a lot. But which of these eight do you think show Solidaridad is involved with.

HM I can't see them.

NZ I can also name them if that's more convenient. So it's production value, chain development, surface provision, consumption, stakeholder organisation, regulation, coordination and investment.

HM So the question is?

NZ Which ones is Solidaridad involved with?

HM I will say that we are involved in all of that that you have mentioned. So production, like I mentioned earlier, we are involved heavily in productivity enhancement. So ensuring that you get more cocoa beans for the same piece of land. Value chain development... And we approach the value chain development from a stakeholder perspective. So who are the various artists in the value chain? I've mentioned some of them up, the regulator, the financial institutions, academic institutions, our research institutions, and we work with all of them to ensure that friction within the value chain is removed to the extent possible.

NZ And what challenges are encountered in this process?

HM So take access to finance, for example. So cocoa farmers need money to invest in productivity enhancement initiatives. Sustainable production is not cost neutral, so they need money to invest in these things, but they don't have the money. So what we do is that we mobilise them into savings groups and then we link them to the formal financial sector so that they can get the capital that they need to invest in these productivity enhancement initiatives. Now, for that to happen smoothly, we also have train the financial institutions in the risks associated with cocoa production and also the opportunities for investing in the cocoa value chain. So knowledge is provided to financial institutions so that they feel comfortable investing in this model for the cocoa farmers. We also do a lot of collaboration with the regulators. So in Ghana, the regulator is responsible for everything that happens in the cocoa value chain. So we do a lot of collaboration with the regulator, especially in the area of climate smart production. So we train the community extension agents of the regulator, because they are in contact with the farmers every day. So we train them in climate smart cocoa production so that when they go on their outreach programmes, they can also educate these cocoa farmers on climate smart or responsible production practises. So these are some of the things that we do when you mention value chain development. Service provision, like I mentioned earlier, we supported the establishment of service provision businesses. And these are usually independent companies that are incorporated under the laws of Ghana. They are companies limited by shares, which means they are companies for profit. We support these service providers to raise the capital that they need to set up and to operate their businesses. Now, because of the poverty levels of cocoa farmers, usually they are not able to pay for the services upfront. So these providers must pre-finance the services that the cocoa farmers get. What it means is that these service providers on their own must have adequate cash with which to do the pre-financing. So we are also support them to set up the proper internal structures so that they can raise capital from the formal financial sector, so they can pre-finance these services. And when the harvest comes in, then the cocoa farmers pay them. So that is from the perspective of the service providers. Currently we have established in Ghana about 52 service

providers operating in the cocoa landscape in Ghana. Consumption, you have to explain. What does consumption mean?

NZ So more the market demand or the consumption of their own products.

HM So we don't do much in the area of consumption because in Ghana, every cocoa bean that is produced by law belongs to the government. So the government would raise capital on the international market and buy all the cocoa beans. So in consumption, we haven't done a lot with consumption because the government will buy all the beans. And then there is stakeholder organisation. So I would combine the stakeholder organisation with the coordination. So we are currently implementing a programme called Power of Voices. And Power of Voices aimed at creating the civic space so that cocoa farmers would have a voice at the decision making table. We believe that currently the decision is made at the top and then it is brought down to the cocoa farmers. But we think that cocoa farmers must also be present when these decisions are being made, so that their input is factored into the solution that is eventually crafted. So we are implementing the power voices and under that programme we are bringing together all the stakeholders in the cocoa value chain or the cocoa space. So they can they can talk and discuss, put the issues on the table, discuss them, develop solutions together. If there are barriers to implementing the solutions, have them ironed out or discussed. Put systems in place to ensure that those barriers are removed so that those solutions can be implemented painlessly. And we do the coordination of all the stakeholders under that programme. And so that programme and the way we implement it is similar to what you would call a system approach to solution development. So all the actors are present when the problems are identified and solutions proposed to them. So that's what we do in terms of the stakeholder organisation and also the coordination. In terms of regulation, we try to influence policy in a manner that creates a conducive environment for cocoa production, processing and consumption to thrive. And we do that through what we call multi-stakeholder platforms. And these multi-stakeholder platforms you can tie that to the stakeholder organisation and the coordination. Because in those multi-stakeholder platform or let me say national multi-stakeholder platforms, you have all the players within the cocoa space coming together and looking at issues from a regulatory perspective. And saying what do we want to do, what are the regulations that create a barrier for us doing what we want to do? How do we amend regulation so that we are able to do what we want to do? And in that room, the Ministry of Agriculture is there, and the Ministry of Agriculture is the Supervising Ministry for the cocoa sector, the Cocobod is there? The Cocobod is the regulator of the cocoa sector. So we all have discussions on issues of policy and regulation and how we think that they can be enhanced to ensure that we achieve our goal for the cocoa sector like we intended. So in terms of regulation, that is what we do. We promote the formation of national multi-stakeholder platforms so that issues of policy can be discussed. And then investments. I have mentioned production and value chain development, service provision and farmers access to finance so they can invest in responsible production and also service providers. Access to finance so they can set up and provide climate resilient services to cocoa farmers. So that is what we do in the in the area of investment. And all of these we are able to do because of the grant funding that we get from the Dutch government, which we use in leveraging private sector investment into cocoa production.

NZ What would you say are opportunities for the future? What is still out there? Because there's a lot already happening.

HM So for me, the opportunity for the future in terms of closing the income gap is to move away from what we have done in the last 20 years. So what we have done in the last 20 years is to say that, are there other things outside of the cocoa value chain that cocoa farmers can do to close the income gaps? So we are saying that, okay, step outside the cocoa value chain and do other things. So, for example, plant some vegetables. Plant some fruits, plant some cereals, plant some legumes. Sell those things and use the income to support what you are getting from cocoa production. And then also come under certification process at get premiums and use those to support your income. Now what we have realised is that over the last 20 years these things have not.... Well, let me not say that they have not succeeded in closing the income gap. But let me say that even though we have implemented these things for 20 years, we still have pervasive poverty amongst cocoa farmers. So I think is an indication that these strategies have not helped. So what we can do going forward is to move away from that. And I have mentioned the Fair Ownership Model. Now, we are seeing that in the cocoa supply chain and lots of cocoa value chain or the chocolate value chain. A lot of value is created in the processing parts of the chain and also the retail part of the chain. I think that we should create opportunities for these farmers to participate in that part of the chain as well. So they are not just producing the cocoa beans, they are also participating in processing and also in retailing. And they can do that wonderfully by setting up retail chains or by setting up processing facilities. They can do these things through ownership in businesses that exist in these parts of the chain. And I've mentioned the example of Fair Afric, where the cocoa farmers form part of the chocolate manufacturing business. They would get dividends if they decide to sell their shares, they would get capital gains. And all of these would help in closing the income gap. So I think that we should begin to look within the cocoa value chain and see what value creating opportunities are there and how we can open up the space so that the farmers who produce the beans can partake in the value that is created along the chain. For me, going forward, that would be the route to take, given that we have tried all the other things.

NZ That's interesting. Because I think also some quite recent literature and research suggests that from just cocoa, the farmers are not going to reach a living income. So in that way you're kind of contradicting that. And I think it's a very hard question to answer exactly.

HM So that literature is focussed on cocoa production only. Assuming that the farmer is just a farmer. The farmer is only producing cocoa and selling the beans. So that is the underlying assumption. Or that's the assumption that the literature makes, that the farmer is a farmer and the farmer remains a farmer. What I'm saying is that the farmer should not remain a farmer. The farmer must partake in value that is created along the chain. And not only the value that is created at the farm level.

NZ So the focus should be on cocoa, but not on cocoa farming specifically?

HM Not on cocoa farming alone. Because you have to produce the cocoa, you have to do the cocoa farming. So in addition to that, they should also partake in the value that is created in processing and also in retailing. Because that is where the most value is created along the value chain.

NZ And how do you see the role of Solidaridad in that?

HM We can do advocacy, and we can bring up examples. Not necessarily in the cocoa value chain alone, but examples in other value chains where farmers have moved beyond production. Of course, they still continue to produce. But in addition to the production, they have also proceeded to forward integrate so that they own businesses in processing all value addition and they own businesses in

retailing, which is where most of the value is created within the chain. And as a result of that, they are better off when compared to their counterparts once done that. So we'll take the counterfactual. The counterfactual being a farmer who is still doing only farming and then compare that farmer to a farmer who on top of the farming is also doing some processing and is also doing some retailing, and then we'll see who is better off. And my thesis is that the farmer who does processing and retailing in addition to the farming, is way better off than the farmer who does nothing, who only sits there and does only the farming. So that's one. Now in the same cocoa value chain. Are we able to work with the farmers to sell all the by-products and the Kumasi Juice and the KOA examples come into mind. So there are other products that are created as part of the cocoa farming and fermentation and drying process, that farmers can take and commercialise. And one of them is the juice that they harvest from the fermentation process. So that's one. Are we also able to support the farmers to add value to the cocoa pots, convert it into biomass that they can use for composting and organic fertiliser. Are they able to convert that into other materials? Recently there are two things that have come up. One is where there's a British company that has used.... There's a thin covering on, maybe I would call it the husk, for lack of a better word. There's a thin covering on the cocoa beans that is removed and discarded. There's a British company that is beginning to convert that into paper. Now, if farmers can sell that to this British company, they can make money from it. The second thing that has come up is developing sugar from the cocoa juice. So, I think a Swiss company or a British company, I think is a Swiss company that is leading, that's where they are able to produce sugar from the cocoa juice. So instead of incorporating cane sugar or white sugar other sources of sugar into chocolate manufacturing or into confectionery manufacturing. They're able to extract sugar from the juice and use it in chocolate manufacturing. And I think they also see that it's even much more cost effective when they do it that way. So apart from forward integrating and doing particularly in processing and retailing, there are also products that are generated at the moment that have not been commercialised. Can we look at these things and look at their commercial value and see what must be put in place so they can be commercialised. So that the farmers, instead of discarding them, can sell them and also make some money off it. So that within the value chain we are confident that we have touched on all the potential income generation points for the cocoa farmer before we begin to tell the farmer that, look, exit the chain or step outside of the chain and go and do something else, because that approach has not worked.

NZ I think we went through all the sector activities and what Solidaridad is doing. Do you have any more comments on maybe challenges that occur or opportunities that are out there?

HM So I think that the challenges, the issues I have mentioned. There is the EU due diligence law which is coming up. There are a few things that ought to be addressed. That intervention focuses on deforestation and child labour. We think that there is a need to include farmer poverty as well. So that intervention of the EU due diligence law is not heavy on closing the income gap of farmers, so it ought to be looked at. And then I think that producing countries also have to be supported in how to develop a national interpretation for the provisions under this act. So they can be supported to do the implementation.

NZ So the governments of the producing countries need support?

HM Exactly. So the EU, or the buying countries must engage the governments of the producing countries to see how they can be supported, to develop a national interpretation for the EU acts and

how they can be supported to do the implementation. And also it has to be heavy on farmer prosperity. Currently, it is very heavy on child labour deforestation, but we need to see a little bit more on farmer prosperity in there. And then in all of these things, innovation is key. How do we look for. And I think one of the barriers to finding or getting new solutions is because we have not taken a design thinking or innovative approach. We saw general thinking around solutions for enhancing family income, I believe we must take a design thinking, slash innovative approach. And should not be business as usual because it will not change the situation.

NZ What are the external factors that are influencing the income of the smallholder cocoa farmers in Ghana?

HM The external factors, we've mentioned some of them. We have mentioned climate. Climate is a key one because it affects productivity. We mentioned the fact that the price that the farmer gets at the global level is not set. So the price is set by people who have nothing to do with cocoa production. So it is not a pure supply and demand situation. So usually pricing is set by supply and demand, but it is not a pure supply and demand situation. The price is driven largely by speculators. And on a Bloomberg terminals, these are people who have nothing to do with global production. So that ought to be looked at. And then within the countries also, for example, the price is set and then it is converted to local currency. You realise that over time, because a local currency depreciates, it affects the real value of the income that cocoa farmers get. So if the farm gate price can be set in foreign currency and paid to the farmers in foreign currency, or even if not in foreign currency at a prevailing estimate rate, we believe that that would help in addressing the issues of important inflation that affects the value of the price that the farmer gets. So these are some of the external factors. The global pricing set by people who have nothing to do with cocoa production is not pure supply and demand issue. The farmgate price, which is said by the local governments, ought to be looked at. So that it is indexed to the currency in which the beans are sold. And the prevailing price or the prevailing exchange rates are used in paying the cocoa farmer. It's not like we set the price at the beginning of the season in local currency and then we keep that price throughout the season. It erodes value that the farmers get. So these are some of the external issues. A consumer pressure in consuming countries and things like that. All of these are external factors that affect the income. So if there is consumer pressure and local governments or governments of producing countries do not react appropriately, that has a potential of affecting the income. So for example, if consuming countries have issues with child labour, but then producing countries thinking that there is no child labour and therefore they will not do anything about it. And consuming countries say, okay, fine, if we don't do anything about it, then we will not allow your beans to come into our country. Eventually it is the cocoa farmers who will suffer. So producing governments ought to be aware of the demands of the citizens in consuming countries so that the producing countries and the consuming countries can work together on solutions that are appropriate for resolving the issues.

5.6 Interview Marten van Gils, Fairfood, 02/08/2022 – translated

NZ If we look at the living income challenge, i.e. increasing the income of farmers. Which stakeholders do you think are important in this respect?

MvG Primarily the one who pays the farmer. We call that the first buyer. They are ultimately the ones who pay the farmers and that is generally where it has to come from. But they are not usually the ones with the most power in the chain. They are often further west. So ultimately you end up with a whole chain approach where we often consider the chain director to be the primary stakeholder. Let's say you have a brand, X, for example. They have a brand to defend. They are the chain director in a lot of their product chains. They then ultimately work through their leverage on their suppliers, with that first buyer. The first buyer will ultimately pay a certain price for the product. So the chain director and the first buyer, those are the two most important ones. But in between, of course, there is everything. There is also retail and the consumer, but these are the most important ones for us.

NZ What is the relationship between Fairfood and small farmers? Is it direct? Or is it more of a platform that you offer to companies in the supply chain?

MvG Yes, it is more the platform that we provide. But yes, as we have by definition a chain-wide approach that literally goes from farm to fork. Of course, the farmer plays an important role. And we as Fairfood, we only have a mission to farmers. So our mission is not to help companies with sustainability. Our mission is to help farmers with a higher income.

NZ So by offering those different projects?

MvG Yes.

NZ What would you say are the implications of these methods on those small farmers? And then perhaps specifically cocoa farmers, if that is possible? But could also be general. How does it affect those farmers?

MvG I don't know if I understand the question completely. But the core of our work, and certainly that of Trace, is that we see that more and more products have to be sustainable. It's a bit of a defeater, but the days when you could throw anonymous products in a jar and get away with it are over. So more and more, not only consumers and companies, but also regulation, must take responsibility for what is in the jar or in the chocolate bar. In short, you need information and data about the first mile, about the farmer. And who is going to provide that data? Ultimately, it is the farmer; it is his data. What his income is. Whether his farm is organically certified. Whether he got a good price for his goods. Whether it is grade A or grade B cocoa. A lot of that data comes from them and that's the crux of the matter for us. Data is a commodity, a valuable commodity, increasingly valuable commodity, which comes along with the product. So you don't just buy a bag of cocoa from them, you also buy a bag of data. And that, tragically, is being neglected. But there is of course a lot of potential in it. That is the crux of our work. We want to put the potential of that bag of data, the value of that bag of data, into the farmer's pocket.

NZ And how do you do that? How does the money get to them?

MvG A lot of our work is about finding models for this. And of course the simplest form is, yes I'm a farmer, I have a hundred data fields about me; what do you offer for this? That is a bad model. You

might be able to get a few euros for it, but that won't help the farmer. It is better to work specifically with companies, with the chain directors in particular, on: what adds value for you? We often call it claims. What promises do you want to make as a brand to your consumer, to the regulator, or to your business-to-business customer? Do you profile yourself in the area of net zero claims, or in the area of living income, or in the area of gender equality. What is important to you? What has value for you? And then we're going to get that value, that data to create that value, from that farmer and pay him for it. That is a better model.

NZ And how do you reach those farmers?

MvG via the chain. Let me take the example of brand X. At brand X, they are very serious about their ambitions. They see that if they don't start working with the farmers from whom they source their products now, in twenty years' time there will be no product coming their way. They see that if they don't start cooperating with the farmers from whom they source their products now, in twenty years' time, there will be no product coming their way. In short, they must ensure that it becomes and remains interesting for these farmers, and particularly for the children of these farmers, to continue farming. More money, therefore. And they consider it important to pay a living income, and to produce carbon net zero. And to produce according to the highest hygiene and phytosanitary standards. Those three things for example, income, carbon and phytosanitary. Those are three claims that we make with them. And they are bought for those claims. Because they give a high-quality product, they end up on the supermarket shelves. Versus product of which it is not clear where it comes from. So there is value in that for them. In projects we work with them towards a valuation of those claims, how much would you be willing to pay to be able to claim this about your product? Is it one percent? Is it ten thousand euros? You name it. And we set most of that money aside for the farmer. So the farmer always gets a data premium in the end, as we keep calling it. In some cases it is a carbon data premium, or a living income data premium, a phytosanitary data premium. It is all about data. And we pay that data premium directly through the first buyers.

NZ So when they provide certain information, they get money in return?

MvG Yes, and very concretely. This is how we do it now in the X chain for the farmers. Every farmer gets a card, with a unique identifier and a QR code and an NFC tag in it. Every first buyer gets a Fair Food app. In which he states, I am buying a hundred kilos of product here. I am paying this price. By holding the card up to the app, the farmer verifies that indeed he, farmer X, is saying yes to this product being sold under these conditions. And there may be a carbon claim in there. It may contain a price claim, a phytosanitary claim. But by bringing that card and verifying it, the farmer digitises the whole process from the very first transaction. And for that you get a data premium. If the farmer doesn't bring the card, he doesn't get the premium.

NZ Yes, of course. And the farmers get all that premium, so that is extra income. But suppose a company wants to make a living income claim. How does that work exactly?

MvG If we tackle it on a large scale, we will really do a living income study, set a benchmark. For product X in country Y there is a living income of Z. That is the ambition, but often they are far from it. This is what you pay now, for example the market price. That premium will get you here, and in years two and three we will work towards that living income.

NZ So then they have a very clear understanding of what incomes the farmers have and what needs to be done?

MvG yes.

NZ What opportunities remain for small farmers to generate a living income? What would still need to be done?

MvG Separate from our work. Look, our work is often about price. But not so much about kilos. A very big factor in incomes is of course how many kilos you produce. Price alone won't get you there and kilos alone won't get you there either. But that is outside our domain. Of course, we do cooperate with partners who are involved in this. But we are not an agronomy party.

NZ Do you notice that this concept is widely adopted in the food industry?

MvG We notice a lot of wind at our backs. We notice that the value of data is understood. Whenever you ask, what would you rather have, a bag of product with, or a bag of product without data? No one has ever said, give me one without data. The crux is, how much then, and what data then? And that is the work. It is difficult to find where exactly the extra value is and how much it is worth. So if the question is, is this widely supported? Yes, it is. The labels are no longer working. In any case, that is not enough to allow a brand to differentiate itself or to comply with legislation or to achieve a carbon target. A hallmark will not get you there. Beyond Certification is increasingly seen as the norm. And we are in that domain. That this requires data is understood and paid for. But it is quite a young approach. And not everyone understands yet that with data premiums you can both move your brand forward and pay your farmers more. And that is why we are a foundation paid from public funds to make that clear to everyone.

NZ How long has Fairfood existed?

MvG Fairfood itself has existed for twenty years. But the Fairfood that I am talking about, a proactive, technically oriented, partner in innovation, has been around for about five years now. We started out as a real activist club that chained ourselves to the Lidl head office in protest, which was really a different Fairfood. We went in this direction five years ago. And for about three years now we have had this product service approach.

NZ And specifically for the cocoa sector. I don't know if you know things about that specifically. Are there things that are different there? Or other possibilities?

MvG We have a multi-year project in Sierra Leone where we trace cocoa. Cocoa is a very interesting commodity for us. We like to learn about it, we also like to work in it more. Where we have started now in Sierra Leone is a unique case, because it is really just a cowboy country, in terms of cocoa. Poorly regulated, poorly traceable, abominable quality for the highest price. It is a very strange country in that respect. So not very comparable with Ghana, where the Cocobod has much more power in its hands and has also managed to make the Ghanaian cocoa market more prominent. But yes, there are lessons to be learned, of course, and our aim in Sierra Leone is to use these premiums to raise the farmers' profile. This year, we are also going to implement the card in a chain there. The point is, however, that traceability is so difficult to demonstrate in Sierra Leone that we cannot even get there

yet. So let alone that we can talk about carbon, living income or phytosanitary issues. For the time being, our aim is to be able to prove that this cocoa does indeed come from this farmer.

NZ So not so well regulated yet?

MvG Just to give an example: The highway from the biggest cocoa area in Liberia, which is next to Sierra Leone, to the capital of Liberia, runs through Sierra Leone. They dump the cocoa at the first buyer they come across along that road, which is in Sierra Leone. And this cocoa is then neatly written under the name of Sierra Leonean cocoa farmers in order to have it comply with the quality marks. In short, there is a great deal of contamination and contraband. And we are trying to make mincemeat of it.

NZ And in Ghana specifically, it is quite well organised. Do you already have a foothold there with this concept?

MvG No. Well, we do work in Sierra Leone with Solidaridad and they have a big foothold in that field. We also work with Ghanaians in Sierra Leone. But we have no experience of our own in Ghana. We would like to work in Ghana in addition to Sierra Leone, and in Côte d'Ivoire.

NZ So it is still quite growing, the concept?

MvG Yes. I actually think that our type of work can add more value in Ghana than in Sierra Leone. In Sierra Leone, they just need to get traceability first.

NZ From the government already?

MoG Yes or from the companies themselves. The reason why big cocoa buyers in Sierra Leone buy cocoa is not because they make cocoa profit, but because they need the currency convergence to escape inflation. Cocoa is not the product at all. The product is an inflation head. So it is not about the cocoa at all, or the quality, or the farmer, that is all a side issue.

NZ And a bit in the other direction. Do you think you can reach all farmers with this, including the smallest ones?

MvG No, the smallest farmer has a bag of cocoa or not even a bag. He says to his neighbour, who is a bigger farmer: "Give me ten euros and you can empty my whole plantation. We also come across this a lot in Sierra Leone. We call them farmers, but they are just the rural poor. They are not farmers, they don't want to be farmers at all, but they happen to have twenty cacao trees.

NZ So it is mainly the larger farmers who are reached by this?

MvG No, the big farmers there, that is not so much our domain. But we are really on the smallholders, not the micro-holders. We are talking about farmers, people who want to be farmers, who also do the things that a farmer has to do, take care of the land and harvest the product and things like that.

NZ And do you think it is possible that all farmers in Ghana, for example, can get such a living income from their cocoa?

MvG No, of course not. Half of the farmers have to stop. Because of inheritance, the acreages are often so small that you can never earn a living. And we, nobody can do anything about that.

NZ And what are the main challenges you face in your interventions, in your aim to increase the income of small farmers?

MvG Quite apart from macro-economics, covid, inflation, that sort of thing. Internal challenges are, the alignment of the chain. Our chain approach has a lot of added value. But it also brings complexity with it. Everyone has to cooperate. If a link in the cocoa chain does not share data, we cannot follow the product. In short, the challenge is often to come up with a good story and a good design with the chain director so that all the links in the chain have sufficient incentives to cooperate. That is necessary to take a chain approach. So that is a challenge. Ultimately, what are you prepared to pay for it? So how much value can we add or how much cost can we remove? How good are we at getting companies to think, not so much in terms of higher prices for consumers, but more in terms of, this is just important for our future. But there has to be a price attached. The farmer must have euros in his pocket. And those euros have to come from somewhere. And to get them, you have to come up with a damn good story. And yes, that is where the challenge lies.

NZ So to actually convince those chain directors of the added value of this?

MvG Yes, and to make him pay. So line up chain, make chain directors pay. And what is always a challenge is to collect good data at scale. The list of Sierra Leonean farmers with all the numbers on it is not to be believed. But what then? How do you get good data? And often it is just in handwritten books, with fingerprints at best for verification. You then have to make something of it digitally.

NZ Yes, that sounds like a big challenge to get all that into one file in the end. And in terms of scaling up your project, is it mainly companies that come to you? Or is it still very much a lobbying effort by you or other agencies to make it bigger?

MvG It is a mixed bag I would say. Companies come up to us, big ones as well as small ones. We also approach companies ourselves. But the biggest driver behind our work is the public-private partnerships, the collaborations between governments, funding institutions and companies. That is, say, two-thirds of our work now.

NZ What risks are associated with this system?

MvG Trash in, trash out. So again, you can have those lists of farmers or that data that we need to verify a claim. If that data is wrong, we can never make it right. Green washing: For an organisation like ours or is it.... We are a bit close to marketing, storytelling and claim verification. Suppose a company has a hundred chains of which ninety-nine are abject, and one model chain is lined up. Then, of course, we are asked to trace that chain and they go off and do it. And the risks, the sustainability, the continuation of our projects after we have finished them, is another challenge.

NZ You set it up for a company and then it's up to them to follow through?

MvG Yes, and to find a scalable and affordable form for this is also a challenge. It's a risk that you set up a beautiful project with funding for a couple of years, but as soon as you're finished everything collapses like a house of cards.

NZ And from the perspective of the small farmer. Are there any disadvantages or barriers to working with them?

MvG Yes, certainly. Yes, here they come again with their interviews and their tickets and their promises about premiums; all difficult. And have they ever seen any of it? That's a bit cynical, but of course, farmers have been haggled to death or visited, promises made, for decades. And very often this never ends in a higher income or a higher yield.

NZ So confident to participate in this?

MvG Yes, it always starts with an investment from the farmer. Even if it is an hour to participate in a training course. The cost comes before the benefit.

NZ Yes, indeed. You can put in the effort and time again, but if it doesn't work again.

MvG I can imagine if I were a farmer, I would have: Go to my neighbour first. Then I'll see how he earns and I'll join in later.

NZ And other things?

MvG Risks?

NZ Yes, or reasons not to participate. Or is it? From the farmer's perspective.

MvG That they are using my data. Farmers often don't know that. But their names, their yields, their areas, their polygons, if need be their photographs, information about their families, it's all in a hundred thousand databases at any one time. None of these databases can be checked, monitored, deleted, and of course that goes completely wrong. They don't notice this now, because they often don't even know it's happening. And that there is a value and a risk involved, but that is a big risk.

NZ I think that's a bit what I had prepared in terms of questions. Are there any other things you think would be useful to know?

MvG That macro impact, especially in recent years, is huge. Last year I was at a meeting in Honduras with a cooperative. And during the meeting, the coffee price dropped four percent. And then he could no longer pay his farmers the price he wanted to pay. And we are in a citrus project in South Africa where transport costs have increased sevenfold. Yes, that farmer is not going to get more for his citrus fruit. So it is extremely important to achieve a good price. And data premiums are indeed a model to generate more income. But yield and macro economics are also big factors that can completely wipe out the effect of just our price approach. It's just a very complex thing.

5.7 Interview Bo van Elzakker, Agro Eco LBI, 04/08/2022

BvE We work on organising farmers into cooperatives and supporting the cooperative. So all kinds of different interventions. I actually sent you a presentation and this WCF study. And you know, there are some pages called interventions, listing 30 different interventions. And we have actually been, or are still in, most of these 30 interventions. And that is perhaps an interesting thing to realise, that it needs an awful lot of interventions over a long period of time to get to change a situation. You cannot just say, increase the price and then all of a sudden everything is hunky dory, as the Americans say. And so that's the first point.

NZ And when talking about the living income challenge, because that's what my thesis is about, which stakeholders do you think are most important when tackling it?

BvE All of them. There are an awful lot of stakeholders. So when I made this landscape level study, I concluded that actually Ghana government or Cocobod plays the most obstructive role, you can say. And the second group is, the lack of cooperation, or the abundance of competition between the cocoa companies. They'd rather fight themselves to death than cooperate. I think that are the two most important in the obstruction. Quite high up there. Because I do think that everything 'below', including the farmers, are quite willing to cooperate or whatever. But when they are not obstructed too much. So that I see as the main stakeholder that, despite what they say, are most stopping the challenge or obstructing the challenge.

NZ And I think you already said it a little bit before, but you are with Agro Eco directly working with smallholder cocoa farmers, if I got it correctly?

BvE Yes. But sometimes in projects that were financed by, for example, Rabobank Foundation, long time ago. Sometimes by big cocoa companies, Mondelez chocolate maker. Sometimes by cocoa beans buyers. Sometimes we work with and we are paid by cocoa cooperatives. So we work for the different stakeholders, you can say. And which I also find quite an interesting perspective situation. That you also work for the farmers directly. So let's say implement a project for a bank or a big donor or World Cocoa Foundation, for example. By the way, we also do some research, mainly in this climate. For research organisations.

NZ For Climate Smart Cocoa? Or something else?

BvE Like IATA, a big international research organisation, is looking at climate change in cocoa and they do some experimentation and measurements on shade and on how to mitigate climate change. And we help them with that.

NZ If you have to put it a little bit shortly, what does your initiative exactly do to close the living income gap for cocoa farmers?

BvE So basically we are trying all kinds of ways and means to increase production in a sustainable way and with that increasing the income of the farmer. Also working a little bit on diversification of the farmer, this agroforestry thing. So also increasing the nutrition and the income base. So it's not just money but also nutrition. And we also have some programmes that focus on health, diet and sanitation. That is more linked with this nutrition side.

NZ What would you say are the main implications of these methods and interventions? Implications for the cocoa farmers.

BvE Interesting question because we're working with cocoa farmers for 30 years and originally we are from the technical side, coming with solutions and interventions which the farmer has to do. And we are struggling already for 30 years into motivating the farmer to do things better, so first to train or make a farmer aware or convince the farmer to change his practises, then we help and coach him to do it. We bring inputs, then the farmer starts doing it. But then we see that some years later the farmer stops doing it. So the acceptance of the farmers to continue to do good and better agricultural practises is really a mysterious point. Which you should not translate in, the farmer is not interested. So that is so it's not a really an implication, but it is a consequence or an experience that we struggle. Which led to an implication, which is that we kind of concluded that when you want to really, say, do a good pruning in the cocoa farms or a replanting of cocoa seedlings or planting shade trees, the farmer should be assisted by what we call youth teams. So that young guys in the community, let's say unemployed or you know, that we train in good practises. And that take care that the farm is sprayed at the right time of the year with the right material. The cocoa seedlings are arriving or planting, holes are dug and the trees are planted the right time of the year and the pruning is done by a youth team. So what the farmer is not able to do by himself, because working on your own is not so interesting. So what the farmer did not do for the last 50 years. We have a team of four or five young men and they do this pruning in one morning or one day. And then the pruning is done for the coming years. And we find it very effective. And so it's a little bit it's a little bit infringing also on the autonomy of the farmer. Because we organise that other people are doing it and to increase the production of the farmer which would otherwise not help. And of course this costs something and that is the interesting question. But we look at this business case of the youth teams and we are looking at different incomes or payment mechanisms. How these youth teams are financed, are paid. Because the farmer does not have any money and the farmer does not have too much labour power at the right time of the year and he cannot do so much on his own. So that's why we do it for the farmer. Well, we have this local youth team that does it for the farmer. So that is quite an important implication. And we still hope that the farmer picks up, when he sees its output increasing. That the farmer starts working a little bit more while also the farmer becomes more healthy and knows more about farming practises, and about timing. So we need to coach the farmer continuously, with local coaches and then he gets into a working rhythm that. This increase in production is maintained. And then also this diversification develops well and the marketing of these other crops works well. And then we hope, or we see it a little bit as a precondition, that slowly, slowly the situation of the farmer increases.

NZ And also that they maybe change their practises on a longer term than just a one time intervention?

BvE Yes, exactly. But that means long time presence. Mainly of the local coaches, or communicators or change makers that are continuously communicating or working with the farmers or with the communities to get these dynamics going or keep these dynamics going. So that is quite interesting. I think that we see this increase of income or increase of production and improvement of nutrition. We see it coming not primarily through the action of the farmer, but this youth team group that somehow always is paid from this higher production of the farm or by donor for etc..

NZ And what are challenges that our encountered in the process?

BvE That is enormous. I think a big challenge is that it's dangerous to say and dangerous to understand it properly. But the Ghana farmer used is now used to, wants to get things, When you ask a farmer, what do you need? He says, money.... And not money, but what else? And then he wants to get everything for free. Well, because he doesn't have any money in his pocket. But they got very used to be on the receiving end. Because Cocobod is promising things, free seedlings, free fertiliser. They do the spraying of the farmer or not. So they promise and it doesn't really happen. Then a cocoa company comes or an NGO comes also with promises, and they bring things to the farmer, something happens. Then the project is over and the whole thing collapses. And the farmer is just waiting for the next thing to happen and doesn't mind to participate in all this, not doing very much. And then, I call it surviving, in the projects. But basically, and then that's my big concern in the last 30 years. Nothing really happened or not too much happened for the average farmer and particularly for the poorer farmer. Because it are, of course, the better off farmers and maybe a little bit smarter farmers or bigger farmers, that pick up on these projects. We see some benefits. Whereas, I would say, the majority of the farmers and certainly the smaller farmers, the poorer farmers. They haven't seen any improvement in the last 30 years. Except that they are a recipient of all these so-called assistance that in the end does not help them too much.

NZ And how do you try to reach those farmers, the poorer, smaller farmers?

BvE Through intensive and permanent coaching. And this delivery model is where we are throughout these, let's say three year projects, try to massage in. Including that these local coaches are being paid somehow. So that is the main challenge, how to introduce things. But also to take care that the farmers, that the communities adopted, all the farmers. And then you have another challenge and that is that quite a large part of the Ghanaian farmers are not active farmers. They are sort of retired farmers. They don't work very much, they only harvest. And from that harvest, they try to make a living and then they have some other incomes and then they have this minimal income below the poverty line, below the living income. But that is enough. So we also work with these youth teams to encourage the farmers to do succession. That when the farmer sees that when a young guy, and women by the way, work on his farm that he can have three times higher production, income. He or she also needs to use inputs. But anyway, it is a much better situation. And that he then softens up towards different forms of succession. But it is important that the farmer maintains his income, so the farmer should not give his farm away to somebody else, not even to his son or a grandson. And then he doesn't have an income anymore because the farmer needs the income from the farm to have some living. But this may be 60% of the Ghanaian farmers. That are semi-retired or passive. And you can say that's a bad situation. They don't make a living income, but they hardly want or need to make these living income. Be very careful. And that is.... and then we come a little bit, say to the methodology of the living income, that it depends very much on the number of dependents in the family. So when you are a young family and you have six or five kids or four kids and two teenage kids, children or young adults. So a family of eight or something, you are in a much more difficult situation to make the living income. Then when you are grandfather or a grandmother who still may have one or two children from somewhere in the family to look after. And theoretically they may find it much easier to make these living income. Whereas the grandparents themselves, they grow their own food in their farm, they have a house and okay they need some medicines, but they don't need clothes. They don't need a motorcycle. They don't need a television. And so then their requirements to make a living or to live there are much lower.

NZ So what you say is that the living income, because it's so generically calculated that it doesn't apply to all the farmers? It makes sense. I think in your email to me, you also stated that you don't think all the cocoa farmers are able to make a living income. Is that also related to this?

BvE Yes. You've seen the calculations that say with the older, not so active, smaller farmers. Say who don't move too much, in terms of production. Well, I'll say stagnated, they will never make it. And... I should be careful saying this, they are happy with it. They wonder, what are you going on about, this living income. I don't want to take any risks. But when you do 60% Ghanaian farmers then you have a little bit of a problem as a development organisation.

NZ So that there should be more focus on the younger farmers with the children and that really are struggling with their money?

BvE So that's why we're focussing on these youth teams. They are yet to be married. And often they are not yet married because they don't have a cocoa farm. And so we trained them as good workers in others cocoa farms, in the hope that these older farmers kind of soften up and want to do some sharecropping, a dangerous word, but let's say some sharecropping. And then they can marry and think of children because they have a basis of income to live from. So that would be the hope of the nation and that is where we try to focus on.

NZ What opportunities can you identify regarding increasing the income of the smallholder cocoa farmers?

BvE This increase of production, of cocoa production. Then we work on this diversification, crop diversification. But we realise that in first instance, it is a little bit patronising, the family should eat it themselves. It's for their own health that they should eat some more fruits, etc.. Instead of all this starch stuff. And then when they have enough of this diversification or it really comes to production, then they should have a market. Well, mainly the wife in the household who would take care of the harvesting of the oranges or the mangoes or the more plantain or etc. or the cocoa yams. It would be the wife that would do the marketing, meaning the wife, in the market. At that moment the wife has the money to buy household items, including food items. So the money is not wasted. This sounds all very black and white and old fashioned. But the male is not wasting the money when he receives a payment from his cocoa because then he drinks or he doesn't spend it in the right way and he doesn't even out throughout the year. So he's rich for three months and poor for nine months. Whereas when these other incomes from diversification go through their wife and are regular. So every week you can harvest something and you can sell something. So every week you can buy your household necessities and improve the household conditions, the living conditions. And when that machine works, then you can look at improvement of the household, etc.

NZ And in your email, you also said that you are critical on the literature. What are you basing the things you are doing on?

BvE I am. We did baselines ourselves and an impact survey, although the word impact is very big. Well, finding out that we did not have too much impact. And that it was limited. And we are trying to understand, we are also doing profiling of farmers. So we have different categories of farmers. And then we did some research in, how would you spend your money and how do you organise your financial management etc.. And so to get to know the motivations or how farmers work and all the family hear. And then we see social scientists coming in who also do this kind of social research. And

you see too often, even when they do it in detail, let's say, surprising information. Like the size of the farms, which is quite an important factor, or even the composition of the family, from one research to the other research the age of the farmer including, but also the number of children and the number of the young children and teenage children change. And then you get quite a different picture. Let's say you have good professional farmers, rich farmers, you have average farmers and you have poor small farmers. And you wonder whether they really have a good representative sample of these different data because in some research you don't see this old small farmer anymore and then you get much better... or looks much better than before.

NZ So the researchers are using different information to base their research on?

BvE And you see that cocoa companies but also NGOs, they do research on, their farmers. The farmers that are part of their project, not the whole community. And these farmers are often the low hanging fruit. And perhaps when you do your research, let's say, in the third year of your intervention farmers will show positive impact. They learnt to do that. So there's a lot of, well not so serious information I would say and that is really dangerous. Because this goes to the north and then people in universities who do not know the reality very well start making calculations and think up the new nice thing. It was climate smart cocoa five years ago and nowadays living income. Child labour was there. Anyway, they think up a new thing and that there is some policy change or the intention of the cocoa companies. And then some money goes to a small number of farmers where they then realise positive change because it is their own farmers and they do their research. And they are successful. Whereas in practise, you don't see so much change in the law in the last 30 years. And that is what I hate.

NZ And what do you think is a better approach? How should it be?

BvE I wish that the Ghanaian government would realise....would really start doing some policy making. Really with the purpose to restructure the cocoa sector. They are very much, in a way they say are active, but they're also obstructive. And basically they also want to earn money from all these projects. And be seen as doing good. But there's not really a strategy or a policy behind it. And they're playing the game. And they also know that the sector did not really change, that there's not much of improvement, that their own programmes did not have much impact, that all these programmes, again, with a relatively few farmers or of the cocoa companies do not have much impact. And everybody like this situation. Including the NGOs and including the researcher. They are all in this circus of development and earning their money and getting hyped up about the new thing, while not really realising the success of earlier interventions. And what the success might be of the current intervention. Because now for some years we work on living income, we may have positive reports, and then we move on to the next thing. Probably increase of production again or perhaps more these climate mitigation activities. While part of the cocoa dies out and basically the situation of the cocoa farmers does not change very much. People need this kind of circus.

NZ So the short term approach in that sense, and wanting success on a short term?

BvE Yes. And not really having a long term strategy. But I mean, I also I was in Indonesia some years ago where the Cocoa Board or whatever you call it, had made a quite fancy strategy for the next ten years. It was also a little bit ridiculous. So when they make a strategy or a policy, it's full with blah, blah, the right words. But, you know already that this will not work. We say that about policy making in Africa. We can also say something about policy making in the Netherlands. It is a difficult thing to do.

And you have to do it. You have to use the right words and be modern and touch in the right spots. And then people become enthusiastic. So that is also important. I would hope that the Ghana Cocobod and the Ivorian Cocoa Board would show a little bit more strategy instead of also having this short term thing or receiving 200 or \$400 more on the export price to be used and a Living Income Differential which goes to the farmers or not. And you know that kind of money transfers. In which they are very interested because it is also a very corrupt environment in money terms, but also in thinking terms it is very corrupt. When you talk with somebody of the Cocobod and you talk enthusiastically about what you're doing, they say, yes, yes, yes, interesting, very interesting. But you know that he wants to fill his pockets or that he has filled his pockets already. And then it's quite difficult to think straight or think in a creative way. In such a, I would not know corrupted is the right word or not. Well, people think in a very convoluted way, you can say.

NZ And within this picture you're making now on the situation, what is the role of Agro Eco in it?

BvE We are working with different companies on different aspects. Recently, the last few years it's very much in installing agroforestry. And then for us it includes climate smart cocoa. So we're getting paid for, let's say, planting trees. Well, we get paid for a little bit more, but let's say we get paid for planting trees. And then we try to include all the other interventions in the work we do. And because you should work on all these aspects instead of just one intervention like planting trees, or installing diversification. And so that is where we work on at the moment. But also on getting.. So we get money to do this from companies. And then you look at the farmers of those companies alone. So then we are looking for financing other projects, carbon funds, who would finance these interventions to be implemented amongst the other farmers, not serviced by a project and in the community. And we're also working on community resource management associations so that the management of the resource is not with, say, Cocoa Board in Accra or with Mondelez in well, God knows where, but within the community. Not with the Forestry Commission, but with the community. And they feel this responsibility and also feel that they manage it. Get also a little bit paid for good management. So well birthing it in the community. That's this landscape approach. So we try, although sometimes we get money for, well, a borehole. Then you cannot work on too many other things. But. But we try to use the money we get, to continue to work in the community on the whole package.

NZ So the money you get is mainly for one thing. But then you try to broaden it into a more holistic approach, long term approach.

BvE Exactly.

NZ And is that also why companies come to specifically you to do these things?

BvE Yeah, I think so. When we start with farmers in a certain site, we like to continue with them. So we don't like to drop them. So we try to involve those farmers, with other donors or other activities, so that we are ten years or whatever with a community. So we try to execute it, and I think people and donors know it. And then we also are constantly on the lookout for what... Because we are a little bit, say, frustrated by the limited impact of our interventions often. That we look for the next thing or how should we do things differently? So then we say invent new things, and or youth teams or this or that. And then we communicate that and people get to know it. So and then companies, donors are aware that we are now innovative, I think it's a very big word. But also feeling responsibility and, really trying

to implement well and continue to support the farmers. We are not an organisation that delivers something and leaves. And I think this kind of involvement or responsibility is quite appreciated.

NZ Are there any other challenges that you encounter?

BvE A particular kind of challenge is that we see this carbon money coming up. So when you are in this shade tree planting, you can be paid through carbon credits, that these additional shade trees are sequestering. So I see a lot of this money coming and there is not... And we are just starting, the last five years, starting in implementing this kind of projects. So we are building the capacity, including in the community, to deliver this intervention, but also this package. And on a larger and larger scale. But what I see as a challenge is that when this becomes really popular and doesn't say too much money coming into the country for doing it, for planting shade trees. Yeah. And there is no real capacity and competence in the country to do this in the right way. So then you get more and more just planting trees and going home and then that would be unfortunate. So we are very much training the next generation of what we see more and more as kind of community workers, fairly allround guys and ladies that that can continuously work or coach the farmers on these different interventions. That I think is the challenge that the delivery mechanism is not there. There are a few NGOs, there are a few etc.. But not enough. And then Cocobod with their own extension service, they don't get it. They are, say, old fashioned, they still think in promoting fertiliser and pesticides and that's it.

NZ The production side of the story?

BvE The old fashioned agricultural extension, as it is called. And not this work with the community, in the community, really engaging the farmers. And not so much selling things, but working with the farmers.

NZ So basing the interventions on the community and actually being there for a longer time. I think that's the main point you're trying to make.

BvE Yes

NZ Are there any other things that you think are relevant for me to know?

BvE No, I'm a little bit puzzled for how you will use this information and the information from, I don't know, 20 other interviewees in your thesis?

NZ 20 is a bit much for my timeframe, to be honest, I'm aiming for 10 to 15. But what I'm doing is, all this information, putting it in a framework, actually. So it's an academic research. So I have to use a theoretical framework. So it's the food systems approach which takes eight six are activities. And then I'm going to put all the opportunities, challenges into these different activities and see what is happening and try to find patterns in what are challenges and opportunities. And then come to recommendation.

BvE One last thing perhaps is remembering this, the WCF study that we did. With the results, we concluded that it can all be financed, that it is profitable for everybody. For the country, for the cocoa companies, for carbon investors, and for the farmers. To go through this transformation, you can say, and most farmers will make it including the living income. Some will never make it. But okay, the farmers also need to become bigger and bigger, etc.. So I think that is also saying good news that it will be a profitable investment. When the parties are able to cooperate together. In first instance on

landscape level, not immediately on national level or international level. That is our proposition. Let's try it on landscape level. Let's try to get everybody working together. Let's see that the government allows it. But also the government guarantees a secure investment climate, to call it in that kind of terms. And so that the companies are not sure that they will kick it out or this or that or frustrated. So I thought that was kind of interesting news. Because you can talk long or short about theories and make a calculation of the income of the farmer himself. But it all needs to happen in a certain environment, say secure or stable, in a way, a known environment, an environment without surprises. And that it is possible, theoretically, when everybody cooperates. And that is also, I think, an interesting piece of information.

NZ And this cooperation, would you say it is already there or is there still a lot of things to happen?

BvE No. It's very difficult to start this. Because the government is quite afraid of cooperating with the companies. The companies are also afraid of cooperating with the government. Because it is about a lot of money and everybody wants to have money. And then also the companies do not communicate very much with each other. But if they would do it for a landscape, as a test thing, that would be very nice. And we are trying to convince them, but it is quite difficult to get this done. I think we need a couple of more years to have a first landscape ready for multi-stakeholder participation and agreement. And then these investments have to be done and then it will take another five or ten years before you see some result. And then of course the question is, is that still in time or has the Ghana cocoa sector been wiped out by droughts, or by something else, or exodus of the farmers, or fire. So you can be worried about that. Because the climate change is coming and you see dried out cocoa trees everywhere. And we are policymaking and trying this and trying that and finding it difficult and and blah, blah, blah. So keep on talking, till maybe it's over. So there's always a bit of urgency in our organisation. But we have to live with it, that things go slow.

5.8 Interview Joost Claas, Tony's Chocolonely, 10/08/2022 – translated

NZ Actually, mainly what Tony's exactly does to improve the income of small farmers. And what Tony's is up against, what is difficult, what is going well. That sort of thing.

JC I think it's good to, if you look at the cocoa industry, sixty percent comes from Ghana and Ivory Coast. So a very large part of it comes from Ghana, of course. And actually these are all smallholder farmers, small farmers indeed. And that system is in place and it's not going to change just like that. And the farmers are not very well organised either. Or they are members of a cooperative, but not all of them. And in Ghana the organisation is different than in Ivory Coast, because there the cooperative is much stronger. And they also buy the beans from the farmers. And in Ghana, the cooperative actually plays a lesser role. Because the farmers sell their beans to the Local Buying Companies, so the LBCs. You would probably know that. So actually it is a different approach for Tony's in the sense that the payment flows are also slightly different. We use the livable income model, which we developed with ISEAL and Fair Trade, and on the basis of that we determine what the livable income of a cocoa farmer is. And what should he get for a kilo of cocoa beans? In Ghana, we have set that at \$2.10 per kilo and in Côte d'Ivoire at \$2.20. And what we actually do is fill that gap from farm gate price plus the certification premium. And we determine that gap every year. And that is what we as Tony's pay, but also mission allies within the open chain. And that model itself actually consists of all kinds of factors. So I don't know if you've looked into that, but the livable income model also takes into account diversification of income. So also looking at what other incomes does a cocoa farmer have? It takes into account family size, the yield per hectare of a cocoa farmer. We assume eight hundred kilos per hectare. Which, if you look in Ghana and the Ivory Coast, is actually too high for the actual yield per hectare that the farmers get from the cooperatives they work with. But it is an achievable goal in the long run. And I think you have to be ambitious about it, but it has to be realistic. And this has been established.

NZ Does that help those farmers get to that eight hundred kilos per hectare?

JC Yes. We actually go beyond certification. We also say that certification is the basis. This means that all the beans in our chain, for example in Ghana, but also in Côte d'Ivoire, are Fair Trade certified. This means that all the mechanisms associated with certification are also active there. The audits of the premiums, for example. In fact, everything that Fair Trade does, this also applies to our beans. But we actually go a step further. And we do that with our five cooperation principles. One of which is traceability, high price, longer term, strong farmers, productivity and quality. Productivity and quality means that we have all kinds of programmes to increase that productivity and thus help the farmer in his farming techniques. That could be, for example, providing training, making pesticides available, pruning, which means that certain trees are removed. We do all these kinds of things. I think we are the top of the programmes in terms of what we do there. But that's not necessarily what extremely distinguishes our model from others. Because that's often the first thing companies do, try to get that productivity up as well. So other companies do that too. With us, the difference lies mainly in the fact that we really pay a high price. The way we cooperate with the corporations, so that is the strong farmer pillar. We actually have a real partnership with the cooperative instead of it being a kind of annual audit where we say what a cooperative is not doing well or is doing well. We just have daily contact and we have a team there that also has daily contact. So it is about the implementation of traceability of productivity and quality and all kinds of processes. How the premium is distributed

among the farmers is in principle the autonomous decision of the cooperative. We are strongly involved in that, but that is also something we really put in their hands. All data, the GPS data of the farm is mapped, the CLMRS data, so child labour, what is found, is also owned by the cooperative. And that seems very normal but it is not so normal in the industry, because very often big companies own the data. A cooperative is a company, it has to take responsibility for itself. So those are things we do differently.

NZ It is very much about strengthening those cooperatives and giving them more autonomy? And they can then support and guide the farmers better?

JC That way those farmers can also prosper and the cooperatives can prosper, because they become stronger themselves. The problem is simply that farmers are badly organised and they have a very unfair position in the whole chain. So you have to strengthen that position, and you don't do that simply by giving money and checking something every year. You do it by being critical and by working well with the cooperative.

NZ And you said that in Ghana the organisation is much lower than in Ivory Coast, for example. How do you deal with that and still be able to work with the cooperatives?

JC I mean, it is organised differently. A good example is that one of our cooperatives that we work with, Asunafo, they have set up their own LBC, which is a Local Buying Company. This means that the farmers sell their beans to the LBC which is linked to Asunafo. And that gives them a lot more autonomy and a better position with regard to the government, for example, which is normally the LBC. I think the LBCs are part of the government. I find it difficult, because I have recently been in Ivory Coast, but not yet in Ghana. So it is very difficult for me to fully explain the difference. In Ghana, for example, things are organised differently when it comes to traceability. They have very large warehouses of the government where the beans go to, that is of the LBC. And in Ivory Coast the cooperative has its own warehouse. So it is all much more organised by the government in Ghana. That makes it difficult to do the programmes we do, I think...

NZ Because I thought for example what you just said about Asunafo, that they set up their own LBC. I actually thought that would not be possible in Ghana because the Cocobod, the government, has so much power there, including over beans and trees and such. But it can be done?

JC Yes, apparently. I don't know inside and out how they set that up either. But they did. So it is possible, but it was probably done together with the government.

NZ And do you feel that you can reach all small farmers in Ghana with this programme? Or are there still barriers to do so?

JC No. We work with three cooperatives in Ghana. And we also get from the volume that we use within the open chain and Tony's, about twelve percent comes from Ghana, 88 percent comes from Ivory Coast. So that means that actually the scale that we are sourcing in Ghana is quite small. We also work exclusively with these three cooperatives. But of course there are many more cooperatives. But we try to ensure that within the cooperative we work with, 100% of what the farmers supply, they can supply in an open chain. So that they have several open chain customers they can supply to. So that we can move towards 100%. And that ultimately, because that is the goal, they can let a farmer earn a viable income. If a farmer sells forty percent or fifty percent to Tony's or to open chain and fifty percent to

another customer for whom they get much less money, then he can never get a living wage. We are actually really looking at those clusters of cooperatives to grow the volume within open chain. So as many beans as possible. And then eventually, when we reach that one hundred percent level, we will connect a new cooperative. And that's how we actually want to scale up. Yes, and hopefully we can achieve a very large volume. But our objective is now to source five per cent of what comes from West Africa, so Ghana and Ivory Coast, in beans within five to ten years. We are now at about fifteen thousand tonnes. And that would mean two hundred thousand tonnes. And that's five per cent of the West African cocoa market. That is a serious impact, but it is still only five percent.

NZ And that very much depends on how many companies are going to join that open chain, right?

JC Yes.

NZ And where does the leverage lie? Is it consumers or those companies or... How do you see it? Where is the change?

JC I think the change lies with the companies. I think that there needs to be an urgency within companies that it's actually not okay, and not normal that so little is paid at that end of the chain, to the cocoa farmer. And that something has to happen there. And I think that, on the one hand, through legislation... That you have to take responsibility for your chain and that you have to know where the cocoa comes from. Because that's also something that is often unknown. So it's often anonymous cocoa that comes from somewhere. So legislation on the one hand. On the other hand, I think a company itself has a responsibility to do the right thing and take that step. I think that the consumer... of course, that would be the ideal world, that a consumer says, well, we only want chocolate that I think retailers have a role to play as well. They, of course, sell most of the chocolate, so as to appeal to those brands again, you could really improve sustainability. I think it's really possible. But it's all about money, that's the point.

NZ Yes, indeed. Because your open chain is open to all companies and that includes guidance towards the open chain, right?

JC Yes, exactly.

NZ Are there any barriers you face in implementing the open chain?

JC Yes, there certainly are. We are now working with a party that processes open chain chocolate. That is Callebaut. Of course, there are several players like that. Not everyone works with them, so we often get that back. Yes, we might also want to work with another party. So that is one example. We have been working for about three and a half years now, almost four years as Tony's open chain. So they are still at the beginning I think. So maybe in the long run... Of course you have to make it market-based and easy for companies to join. Secondly, I think it's about price. Companies also find it quite difficult that they have to pay a bit more for cocoa. And they also find it difficult to What we do... Because cocoa is a harvest product, it is harvested every year, starting 1 October. And we ask companies to give us an annual forecast of how many beans they are going to use. So they translate that from a need for chocolate to a need for cocoa beans. And the companies find that difficult too, because normally they just order chocolate. They just order a bar of chocolate or a box of chocolate, and that's it, without knowing the timings behind it. So they have to be more committed. And think a

bit more about their bean volume. It also gives them a direct relationship. And companies often find that difficult. I think those are the biggest barriers.

NZ And are there any barriers for farmers to actually participate in this?

JC Not in principle. If they work within the cooperative, they share the premium, for example. That is also distributed over the entire cooperative, so not just to the farmers who... Look, maybe I delivered beans as a farmer and my beans go to the cooperative. Look, I may have delivered beans as a farmer and my beans go to an open chain and those of my neighbour, the same beans go to another party. Then of course it is unfair. So that is how it is distributed. What is important, however, is that the cooperative also acts according to the rules. This means that farmers do not cultivate cocoa in protected areas, against deforestation. So that is important, that there is no fraud. They just have to follow a few rules that are logical. So, in principle, any farmer in the cooperative can participate.

NZ And if within a certain cooperative, for example, 50% of the beans go to the open chain, then that premium is distributed among all the farmers? So that means that all the farmers get less premium than if it were fully provided through the open chain, right?

JC Yes, that's right. Of course, that depends on the other customers. Look, we have no insight into who those customers are. We can see, for example, we have a bean tracker software system where traceability is checked throughout the chain. Now we can see, for example, that they have other customers, but not which ones. And so we don't know how much they get from that other customer. Look, actually you want to go to open chain as much as possible, or maybe to another customer who pays a lot. But there aren't that many, so that's difficult.

NZ What opportunities are there in terms of open chain and increasing income for small farmers?

JC I think productivity is very important, so that they can produce more from a piece of land. It's mainly in those five principles of cooperation. So paying the high price... I think diversification of income is a very important element in the income model. Because you don't want to make people dependent on one commodity and only one crop. That they also do other things, for example, have other incomes. I think that is also a very important aspect.

NZ For my thesis, I divided all the interventions that are done into eight sector activities. And of course we have already discussed a lot of things. Let me just share my screen. These are the eight. Does Tony's work on all of them? Or are there any that are not covered?

JC Could you explain some of them? I can guess.

NZ Yes. Well production, so indeed productivity, quality, things like that. Value chain development, the development of the entire value chain in order to ultimately increase income. Service provision... they also overlap a bit, but through the cooperative, for example, training or information, but also information about, for example, the price for the next season, things like that. Consumption can be the consumption of their own products. This is not very relevant for cocoa, because it is not really a means of consumption for the farmer himself, of course. Then you are more concerned with other commodities. Stakeholder organisation, what about the cooperatives? Do they have more power in the chain as a result? Regulation, more government, policies, legislation and so on. Coordination, which is about coordination in the value chain. So what is the cooperation between the various parties

who all have an influence on this. And investment is about access to finance, both public and private investments that farmers can make in their products on their farms.

JC Clearly. I think when you talk about investments, what we also do with our programmes is that for example Techno Surf, we've hooked in. That's a third party that helps cooperatives improve their accounting and things like that. So actually, all those kinds of processes can be improved within the cooperative. If you look at legislation, it's interesting because in Europe they are now actually working on due diligence legislation, more obligations on transparency of the chain. And during Chokoa there was also someone from Asunafo who was with us, Patrick, he is the general manager. He told me that, so the legislation goes between the EU, or European Commission, I don't know exactly. But the Cocobod is involved. But that the cooperatives are not asked for anything, so what is in it? So I think that also says something about the position of the cooperative. That they're not important enough and that all sorts of things are decided that don't involve them. That was an enormous irritation for him.

NZ And that is about the implementation of that due diligence law, in the cocoa area for Ghana.

JC Yes. And so the fact that certain conditions are not really in favour of the farmers or the cooperative, but more in favour of the Ghanaian government or the companies in Europe, means that it may not go far enough. But ultimately, what needs to happen is that, of course, the farmers have a negotiating position. The position of the farmers must be strengthened and that of the cooperative must be strengthened. And that is less evident because they are not included in the decision-making process on the legislation. So I found that interesting when he said it.

NZ Yes, so you are very much trying to strengthen the power of the farmer through those cooperatives. But then they are not included in the decision-making process because that is completely regulated by the Cocobod.

JC Yes apparently by the Cocobod, and so..... I think, I look at it a bit from the outside as well. But companies, big companies, just make a lot of money in the cocoa sector and they have a huge position of power so they won't want to give it up just like that, of course. I think the Cocobod of course also earns a lot of money from cocoa. In fact, what you want is for that position at the bottom of the chain to be strengthened. Yes, that is very difficult. You can see that there are all sorts of mechanisms that make it difficult. And that is what we are trying to do with open chain and Tony's, to make sure that it happens.

NZ And what about the coordination of different parties in the cocoa sector? Do you also do something to bring them together, or something like that?

JC Yes, definitely. We are working hard on legislation, so we have a lot of contacts with the European Commission or with the people who are lobbying there. But also with parties within the chain. We also talk a lot with the government. With Cocobod, for example. Are we involved with all kinds of parties? I don't do that myself, but those are my colleagues who are involved in that. With the Dutch government as well, I think. And of course with our own supply chain partners as well, with whom they have contact. So yes, definitely. Look, I think it's also very strong that we as a chocolate company are really in the chain all the way up to the farmer and don't buy chocolate from anyone. So that coordination is inevitable.

NZ And you are also recruiting companies for the open chain in your work, right? How successful is that? What do you find there?

JC Success, I guess that's how you measure it. We now have six parties participating. This year we have at least added two. I think a lot of companies are interested in this and we really have a lot of conversations with companies. Companies that approach us. And they are already well known, well-known companies. So that does mean that it appeals and that in that sense it is an interesting platform initiative. So I think it's successful. I think it's successful, how we pursue our mission, what we want to achieve. We are working hard to improve that model all the time, of course. Making it easier and easier and making sure that companies can't say no to more. So that success will have to go up. But I think it's pretty well put together if I'm honest. But I'm not the only one who thought of it, of course. People are of course really susceptible to this, that sustainability steps are being taken on this. And companies also sign all kinds of covenants. For example DISCO and things like that to have more sustainable cocoa as an organisation but then don't really know how to do it. How to get it done. We can help them with that. I think it's great that it's innovative in the sense that we as a company are just opening this up and not necessarily making money from it or anything, but just doing it because we think it's important. I also think it's a success in the sense that you're not just concerned with yourself as a company. I think that's good.

NZ I've been following Tony's for a while now and it's super interesting how it and a company started around an ideal. It also shows that you can simply build a business model to improve a certain value chain. And that is super interesting. And of course it is also used as an example for a lot of sustainable business courses. Are there any other barriers or opportunities that you think of that have been encountered?

JC Where exactly? Just in the chain or at all?

NZ Yes, in general. But maybe specifically also for those small farmers in Ghana, because that's what my thesis is ultimately about.

JC Payment, for example, is also a challenge. They get paid in cash. People there are also just not ready for mobile payment, there's just not enough reach I believe, internet. And I think that's something that will probably happen in the future. There are many farmers, but you see that in the Netherlands too, many older farmers. So that is a real challenge to ensure that new generations also want to do this. And the climate, of course, is a huge problem, even there with changing climate conditions. So there are all kinds of challenges, I think, for the entire sector. Everyone has to do something about it. I have not yet been to Ghana, so I find it difficult to say anything explicit about it.

NZ Logical. And for example, since you had been to the Ivory Coast, what stood out there?

JC You can see that they are literally all small farmers, with small pieces of land and difficult roads. Although I didn't think that was too bad up to the cooperative, which was a fairly new road in itself. But further into the bush itself, it was of course.... You just see in that accessibility, you hear and read about it, but you haven't seen it yourself. So that's what struck me. That actually the whole industry is geared to that. So because there are so many small farmers who produce so much volume of beans every year. That's actually quite bizarre, if you consider that here in the Netherlands.... We all produce such large quantities and that comes from a few, a few big players. But there (West Africa), a mega quantity, so sixty percent, of the entire world supply comes from, and that comes from all these small

pieces of land. When you see that for yourself, you really think, how is it possible? And that all those trucks from there, from those bad roads, go to the coast to export. It's pretty weird that that's still the case in 2020. And I don't think that's going to change any time soon. I found the overall picture to be especially... And how difficult it is to implement things like traceability. To be able to guarantee all that. To guarantee that no fraud is committed or that the farmer receives the right amount. Things like that. I can well imagine that it is very difficult, what we are trying to do.

NZ Yes, indeed, and maybe there is also a lot of corruption? I hear that from several people I've talked to that that's a real problem, in the implementation. But you do have people working for these cooperatives, don't you, to see how things go?

JC Yes, we work with the cooperatives, with the management of the cooperatives. We have a team in Ghana and Ivory Coast, and they are the ones we contact with the cooperatives. And then there is someone who does traceability at the cooperatives, for example. But of course it's not the case that someone In Ivory Coast, for example, he has eight cooperatives where he does the traceability. So of course it's not like he goes there every day or every week to check things. And the control mechanisms are there, yes. But it's not as if we are on top of things. I think it's also very much about trust and placing responsibility with a cooperative. And then of course a number of years ago, we worked with one of those *Chocopodies* in the Ivory Coast and there was also a case of fraud in traceability. We stopped working with them for a year. So there are all kinds of mechanisms that we implement in order to carry out checks. And now we are working with them. I think that is also a strong point that we then look at. How can we do that again? Just arrange it again so that it will be alright.

5.9 Interview Rupert Day, Cargill Cocoa and Chocolate, 10/08/2022

NZ When looking at this living income challenge, which stakeholders do you think are the most important to actually get these farmers to this living income?

RD Well, the farmers. Starting from the ground up, I think. Thinking through a farmer lens and from a community lens is absolutely essential. I think some of the biggest challenges we have as an industry are not doing that and trying to think of a more structured approach that is scalable, when in fact the context within which each individual farmer finds themselves is incredibly different. So trying to think of a strategy for a global business to impact a quarter of a million farmers, which is what we have in our direct supply chain. Finding a sort of scalable model is very difficult. So, farmers and the community around themselves, that includes farmer organisations, cooperatives, etc.. Depending on the origin that we work with, we direct our programming either directly to farmers or we work through cooperatives and farmer organisations, so they're really key. Ourselves, so traders, buyers, processors, etc., that sort of middle gap. And that's both global companies like Cargill, but also local traders and suppliers that we also work with. Governments are really important, and I think really important are origin governments as well as EU, etc. But if I mention a little bit on origin governments: I think that's both from a regulation perspective, but that's also from a facilitation perspective. So, we think about living income as being beyond a challenge that the cocoa industry itself can solve on its own, where we really rely on governances around helping us understand what their rural development planning plans are more broadly. So how does cocoa fit into a broader rural development plan, and farmers that are potentially unable to earn a living income from cocoa, what are the other opportunities for them? And also what skills and capacity development activities do they need and that we can contribute to build a bit more of a resilient rural economy? I think that's such an essential role for origin governments. There's also the sort of regulation perspective from them in terms of telling us as an industry what they would expect us to pay something like the living income differential, which I'm sure you've looked into this and they obviously play a role. A role there is there. But yeah, that sort of facilitation piece I think is really, really important for origin governments. And linked to that, I think, are organisations like IDH, who are trying to bring the industry together to sort of determine what initiatives are working and not working and what else is needed to really drive change in the sector. I think they're doing a good job so far in terms of bringing organisations together and the multi-stakeholder initiatives like the Dutch DISCO; you know, the multistakeholder initiatives will be coming together. We're talking about the strategies that we're trying, but also the gaps that we're identifying. Yeah, there are many examples of that sort of forum and those sort of organisations that are trying to do that for the cocoa industry. So they're also playing vital role and also trying to bring the origin governments to the table and to have those conversations. And then eventually something like the EU or North American governments around legislation there in terms of what may come along in the future around around living income. Obviously, we don't have any formal legislation around living income yet, but it's certainly mentioned in many documents either by the EU Parliament Commission, etc., and presumably at some point in the future there will be some legislation from the EU around minimum standards of living income. Finally, as well I think brands and their customers are really important because brands, our customers, will often drive some of this conversation, because they will set themselves commitments and objectives on what they want to achieve around topics like living incomes. For example, Unilever has the global commitments on living income by 2030 for the direct suppliers. That type of initiative has sort of a trickle-down effect, because the people who will mobilise that in their supply chains are their suppliers like Cargill, Barry Callebaut, Olam, etc. I talk specifically

about cocoa, but obviously that's a global commitment for Unilever. Someone like the sort of outlier brands like Ben and Jerry's, Tony Chocolonely, who push a bit more on paying a fair-trade living income reference price for at least a proportion of what they're doing. So there's sort of the really high-complexity brands like the Mars, the Unilever's, who do think about living income across their whole supply chain; and then you have those smaller brands that are piloting models that the rest of the industry can potentially learn from.

NZ Yeah, for sure. And if I understood it correctly, you are both working with, for example, the cooperatives, but also with the farmers directly?

RD Yeah. I'm speaking a bit broadly here, but I know you're thinking specifically about Ghana. Obviously, in Ghana, we don't have as much of the cooperative model as we have in Ivory Coast. So, a lot of our work is directly with farmers or smaller farmer organisations. Cargill has a licence buying company in Ghana and then we have our buying stations in cocoa growing areas, and we then use those buying stations to work directly with farmers in the geographic area around there, where, in partnership with Cocobod, we will deliver training, support services, access to input programmes, etc. directly to farmers. But for Ghana, as I say, it's a slightly different type, because there are some cooperatives, and it's a movement that we're also supporting there; but the majority of it is straight to farmer.

NZ Regarding closing the living income gap, what are initiatives, things that Cargill is doing, to close this living income gap in Ghana?

RD Sure. So the best description of this is, Cargill's sustainability programme is called the Cargill Cocoa Promise. And the Cargill Cocoa Promise is our vehicle through which we deliver our sustainability commitments and those of our customers and the Cargill Cocoa Promise whilst it is an overarching framework, it's also a delivery model. We deliver a range of activities, both cocoa and non-cocoa within the Cargill Cocoa Promise. The Cocoa Promise has a farmer training and farmer coaching model. Farmers within the Cocoa Promise network are trained on an annual basis on agricultural practices. Also, we have a scaling programme, to 1-to-1 coach all of our farmers as well. What that involves is a more individualised level of support, on that specific farmer's farm, looking at what improvement opportunities there are and putting together a farm development plan with which the coach, who is generally a Cargill employee or working with one of our partner organisations, will deliver bespoke recommendations to that farmer.

NZ You're talking about a coach. How does that work? Is that one person working in one area for a longer time, or...?

RD Yes. The coach is responsible for a number of farmers over the year, and he will visit each farmer individually during a specific period in the year. The coach is either a Cargill employee or is employed by one of our partner organisations, depending on the region of Ghana. Generally, they are a Cargill employee and they receive an annual training of what we expect from them, both from a data collection perspective, but also from a technical perspective on what they can deliver to the farmers. And in theory, farmers who are part of the programme for a number of years are visited by the same coach over a series of years to update those recommendations and review progress. So a farmer will be visited once a year with something called a diagnostic survey. That's in the beginning of the year to work out the condition of the farm and what recommendations there are. Then a second visit, called

a follow-up visit, later in the year, where those recommendations are put into practice. The coach can then check with the farmer on which ones the farmers prioritise, which ones he may need more support with. And then we analyse that information on an annual basis to determine what topics we should be covering, but also for more broadly within the Cargill Cocoa Promise what activities we should include the following year, what programmes we could potentially start, cocoa-specific activities that is, from a step from a productivity and a profitability perspective.

NZ So all the interventions are productivity-, profitability-based and then you work it out according to what you see on the ground.

RD Specifically for the coaching and training model, yes, it's focused on productivity. We then have example programmes. For example, we're working on an income diversification programme in Ghana on chili peppers. We work with an intervention manager there, an implementing partner, who trains farmers on growing and processing of hot chilli peppers and also with access to market. In this programme we're looking at scaling as well where we're trying to provide something that is an alternative or supplementary income to cocoa. But with crops outside of cocoa, we're also very conscious that we as Cargill will not be able to buy them. Cargill currently in West Africa only really sources cocoa. In terms of access to market, it's something we take very seriously. We want to make sure that the opportunities that we recommend and trained farmers we work on, are viable and sustainable, because we take our responsibility to our farmers very seriously. As you know, cocoa forms the vast majority of farmers' incomes, 60 to 90%, let's say. Cargill is the main source of their income. If we are suggesting to grow something else, it's likely that they will take it seriously and will do that. We need to make sure that our recommendations are based on solid research and solid foundations. So, when we're looking at income diversification, we really try and build a really solid understanding of what market opportunities make sense. And that also links back to my point earlier around where support from government or relationships with government I think are really important: so that you can understand for that specific region or district in Ghana or indeed for the country in general what opportunities a) make sense and b) are part of a long-term rural development plan for that area, linked to government rural development plans.

NZ What are the main challenges that you encounter when trying to close the living income gap for those smallholder cocoa farmers.

RD From a cocoa perspective, productivity still remains a challenge for us. We're not wedded completely to the older view of productivity being solvable problems. That's certainly not the case. We obviously balance our supply and demand requirements quite carefully. But yield improvements remain a key challenge. And that's both from an uptake of good agricultural practice interventions, but it's also around risks of disease and weather patterns, that another thing that we've seen over the last couple of years: that Ghana has its fair share of pest and disease challenges, and it's also had a pretty bad couple of years in terms of weather and crops. So that remains a big challenge and it can undo a lot of the work that we do. A lot of the support we give to farmers is around the impact of peasant disease and then the impact of poor climatic conditions. In terms of outside of cocoa, it's I think it's also determining what opportunities make sense. That's a that's a big challenge for us, I think, in determining what will work for 2 to 400 farmers, let's say, in a small pilot programme, when we work

with many thousands of farmers in Ghana, you know, so understanding what opportunities we feel make most sense and which ones are viable. I think that's a key challenge for us.

NZ You were saying you are working with so many farmers so it's hard to determine what works for all of them. When you take, for example, Tony Chocology, they are a bit smaller. They can maybe identify better what actually works for a smaller amount of cocoa farmers. How do you deal with this issue as you have so many farmers and they're all their difference?

RD It's a good question. I think the main from a cocoa perspective, the main way that we deal with it is by having this 1-to-1 coaching programme. So understanding, trying to really get down on an individual basis, what makes most sense for them. We find that just a sort of generic training programme doesn't really cover it or at least there's more that can be done. That's why coaching is such a key part of the Cargill Cocoa Promise. It goes over and above what is required from a certification perspective by Rainforest Alliance, etc. Coaching is an add-on to that. We find that approach really important. I think that also it's about identifying opportunities on a smaller scale and having proper robust impact and analysis feedback loops on small-scale programmes, that we can then look at how we integrate that into our main programmes. We have a sort of core delivery of activities, and then outside of that we have many pilot programmes, small-scale programmes, either by ourselves or with development partners and/or with our customers. What we're doing in those is trialling new ideas to see what can work on a small scale, and then those feedback loops on what has worked and what hasn't worked are super important for us. It's also where we work closely with organisations like IDH to bring lessons from smaller programmes, not only for our own learning, but also for learning from the industry in general to say, okay, how has this approach worked? What are the lessons from this small programme and what can be taken into our broader approach? And quite a bit of that is - not just us of course, but across the industry - what informed IDH's living income roadmap and their own sort of formula of activities that they feel are the recipe for closing the living income gap. A lot of that has come from conversations with companies like Cargill and others around what we've tried and what we want to try in the future.

NZ And are there any opportunities you can identify regarding closing the living income gap?

RD In what sense?

NZ What's still out there? What can still be done? What are our opportunities?

RD I do think that segmentation is incredibly important and that's not necessarily an opportunity in the sense of a specific programme. But I think that building an even clearer understanding of the profiles of farmers within a supply chain, and understanding what is most relevant for them, I think that is something that we'd started doing through the data we collect and the way in which we target our activities. But I think segmentation based on real insights about a specific area or a specific set of farmers is really what's key to understanding what the potential for closing the income gap is. There's a lot of different options in terms of how that segmentation is done and what characteristics of farmers that you use to do that segmentation. And of course, we can run that from a data perspective, but actually that doesn't necessarily reflect the reality on the ground. There's then that really important step of determining farmers' interest, ability and motivation to either invest further in cocoa and that be the path by which we can really see a serious improvement in their incomes, but also understanding where for others, it's maybe a mix of cocoa and other sources. And maybe for others, cocoa in the long

term is not really a viable income driver to close the living income gap for them. Being able to articulate that more clearly, I think we as an industry are currently doing that very well. It's I'm sure we and others are working on it to say, okay, how do we best target these activities? And behind that, what are the data points that we're collecting to help us make those decisions and then this sort of feedback loop on what works. I do think it's not a new idea, but it's not being done at scale. No large-scale supply chain is being segmented in the way in which it potentially could be.

NZ Regarding collaboration, there are a lot of big companies working in the cocoa sector, of course. How do you collaborate with those? Or is it mainly you with your own suppliers? And will you sell it to the companies, the brands?

RD There are a number of different ways in which we interact with our peers. Forums like the World Cocoa Foundation, the DISCO that I mentioned earlier, the GISCO are three key ones. It depends on what level we're doing it at, but those are the three that come to mind from a living income perspective; those are the three that come to mind in terms of where we're having these conversations. Also, when events are organised by organisations like IDH; they recently had a Living Income Summit. We also work very closely with the living income community of practice and we were a funder of the living income community of practice. The various benchmark studies that have been done recently in Brazil but also in West Africa and elsewhere in the world; we funded that along with along with our competitors. So those are the key sort of forums that we come together in and talk about living income in, and think about what strategies are working, and those sorts of conversations are generally facilitated by the IDH or the Sustainable Food Lab or the World Cocoa Foundation. There are different conversations that we have at different levels. For example, the EU Cocoa Talks that are ongoing at the moment, some of which is focused on living income; that would not be something that I myself would attend, but senior members of the business would attend and then senior members of origin governments and senior members of the EU. So there are a number of different levels of interaction that we have around these topics, both from a sort of a practical perspective, which is where myself and my colleagues in Ghana would interact, then the sort of country level and then the EU level, as it were. So, there are a number of different levels, but I would say the two or three key ones are the World Cocoa Foundation, the ISCO's. That's probably the key ones for us.

NZ There's enough ambition within the sector to really go to a very sustainable sector. What is holding it back?

RD What's holding it back ... I think consensus on a clear path forward, and I think that links also back to the 'what-works' question because cocoa and cocoa pricing and cocoa development is highly politicised as well. There are different schools of thought on whether price or supply are the key answers: how does how does price fit into the formula, what the implications and what the impact of increased pricing would be. I think that's one topic we really haven't settled on. The origin governments have a very strong opinion that living income is an economic challenge; which is why through the introduction of the LID, which Cargill pays and all of our customers pay, that's one of the mechanisms that they've worked through. The industry is also thinking that there's a broader solution, which is sort of what IDH is proposing as well, around price being one component of an approach. I think having some consensus around what works, is what's missing currently. But the challenge we have is that we're all still testing what could potentially work. We've all got living income programmes or pilots trying to determine what impact we're having. But actually, it's extremely challenging to then say,

okay, this is a sector-wide approach to do that. And it may well be that we never get there because that's not actually what's appropriate because of different contexts and different approaches to how companies interact with cocoa suppliers. I'm trying to think how best to frame it. I think the challenge we have is that we're trying to look for a solution for one solution to a very, very multifaceted problem. And there are strong opinions on maybe there being one answer to it. And I think, yeah, that's not necessarily the consensus. I think what's needed is more pooling of ideas, or not ideas, pooling of experience on what organisations and companies are testing in trying and really getting some hard evidence on what has worked and most importantly, also what hasn't worked and being open about what hasn't worked. Because I think we as an industry ... there were a lot of pilots that were sort of small programmes may be working with two or 300 farmers on a specific economic opportunity or on a specific set of training within cocoa. But actually, whether it's worked or not, none of us are entirely clear. I think there needs to be a bit more confidence and a bit more openness to sharing lessons from programmes that people are trying, and to see how we can all take that aboard and all integrate that into our own internal supply chains.

NZ And also to scale it up in the end, because that you also mentioned as a challenge.

RD Exactly. And what we don't want to do is to scale something that will have an adverse effect upon not even necessarily just the cocoa sector, but potentially other supply chains that we then interact with. And I think for Cargill, we are slightly different from Olam, for example. Olam has been able to integrate other opportunities into their approaches because they purchased multiple commodities, I think in Ghana as well. So in terms of how they can bring smallholder farmers into multiple supply chains, Olam has quite an integrated approach. For Cargill it's a bit more challenging, as we only buy cocoa. How we build these approaches relies on very strong partnerships as well, to make sure that the approaches that we're promoting and developing are all integrated from a market reality perspective as well.

NZ Makes sense. A lot of information already. For my thesis, I have decided all the things that can target these smallholder cocoa farmers into eight different activities. I think most of them were already touched upon. But I was wondering if Cargill is working with all of them or some not.

RD Production: Yes. Value chain developments: Yes, in the sense that we are an exporter. We pay the living income differential, we pay the certification premiums, etc. But we have a business in Ghana, so we have a licence buying company in Ghana. We are the exporter, we are the buyer and we are the exporter in Ghana. Service provision: Yes. Do you want me to give you details on each, or do we just go through and say, yes? So, service provision: We do coaching within that but also we have access to input programmes. As part of the Cocoa Promise, we have a programme called Kaneohe in Ghana which facilitates access to fertiliser and pesticides, and that generally is done through a cost share and then a repayment on delivery. In some situations, we provide it for free as well. But in other situations we have a regional on delivery, but that's us becoming a guarantor for various companies that are providing inputs to farmers. Consumption: No, I don't think we do anything on consumption in Ghana. I mean, we process in Ghana, so we have a large cocoa factory in Ghana; but it's not for the Ghanaian markets, it's for export. Stakeholder organisation: Yes. We work with farmer organisations and cooperatives. We work directly with them, but also we are actively promoting capacity development of those from organisations. We work very closely with them; particularly in Ivory Coast, but increasingly in Ghana as well. We see cooperatives and farmer organisations as a very positive thing in

terms of our ability to deliver services, but also their ability to deliver services to members, and also inform us on what services might be most relevant to them. So they're a key part of our delivery model.

NZ And how are you doing that, strengthening these cooperatives or helping them?

RD We have a plan, and this I'm a little less sure on, we have a plan, I think, to promote the establishment of cooperatives. I think that will be working through the relevant ministry in terms of the, the governance, the setting up of them, that sort of stuff. So we have a programme basically on the establishment and the subsequent putting structures in place in the various committees, etc., etc. So we help establish them. Regulation: This I'm a little less clear on for the Ghana context. We obviously have a strong relationship with the government on a number of different levels, particularly with Cocobod. Cocobod we work really, really closely with on a lot of our programming. As you know, for Ghana, Cocobod is involved in every activity and a lot of what we do is channelled through the Cocobod. So we have a very close relationship with them both in the field, but also at a national level. We have our policy engagement teams and we have various colleagues who work closely with the government to understand how we can best work as closely as possible with them, and also understand what their thoughts and ideas are for the sector in general. As I said, one example of that is the LID. We were part of the negotiations and the setup of the LIDs. And now we are somebody that pays the LIDs transparently to the government. Investment ...

NZ So this is more related to access to finance for poor farmers.

RD So access to finance is something that we're looking to expand more. We don't currently have direct programmes in Ghana on this, but we've been scoping with some partners actually this year around what programmes we could set up. It's a bit broader. We do do VSLAs, Village Savings and Loans Associations, establishment in communities. That's a bit more community led. It's generally either with spouses or with community members around setting up Village Savings and Loans Associations. But yeah, our portfolio on access to finance is quite limited, I think, in Ghana. But it's certainly something from my perspective, I'm very interested in expanding and looking at what partnerships we can build, not necessarily just with the finance sector, but also with organisations that run programmes like that. So maybe microfinance, but also potentially development organisations that are wanting to de-risk investments in farmers. An example we have from Ivory Coast is, we work very closely with IFC on access to finance for cooperatives. And we've been talking with them about what opportunities there are potentially for our programme in Ghana as well. They're at quite an early stage. But in terms of thinking about it from a living income perspective, it's a clear component of that, especially if you're looking at increasing the professionalisation of certain farmers to really drive on and close the living income gap; access to finance is obviously crucial.

NZ And so still an opportunity for Cargill to look more into that.

RD Yeah.

NZ And I was wondering because you said that in Ghana the organisation is not that structured with the cooperatives, etc.: Do you think you are able to reach all cocoa farmers with the programmes?

RD Sorry, can you say the beginning of that again? I lost you a little bit.

NZ Oh, yeah. Sorry. Ghana is a little bit less organised regarding the cooperatives and the way the farmers are organised. Do you think you can reach all the small cocoa farmers in Ghana with your programmes?

RD Yes, we do. And actually the reason for that is that our programme on our infrastructure and our team there is incredibly well structured. So yes, in terms of our access to farmers, our network is very, very impressive and our infrastructure there is very impressive. That's not just Cargill staff; we have a lot of Cargill staff, but it's also our delivery partners and also our close relationship with Cocobod. So in terms of reaching farmers, we don't have a challenge in Ghana in terms of physically reaching them, because of the way in which our company is structured there and also in terms of how our field delivery services are structured. We're pretty proud of them, to be honest, and they work very effectively. We get good quality data from the Ghana team and we are able to visit the farmers that we coach twice a year. So, in terms of access to farmers, we don't have a problem; and that's down to how we've organised the business there.

NZ Well, that's good to hear, because I think a lot are also saying: Oh, it's very hard to actually reach every farmer in Ghana or other countries.

RD I think it's a challenge in the sense that it takes a lot of effort. Yes, it is a challenge, but we feel that we set up well enough to do that. We have more of a challenge in Ivory Coast, where we do work through cooperatives more. And the market is obviously quite different in Ivory Coast. There's a lot less direct government support and direct government involvement. But in Ghana, we feel that, depending on the activity, it's pretty good.

NZ Okay, great. What have been the main implications of the Cargill Cocoa Promise on the smallholder farmers in Ghana?

RD The implications, I think, from a positive perspective are that they are brought into a very structured supply chain and that can either be that we're selling from them directly to a specific customer, so they will then benefit from direct additional investment from that specific customer. As I mentioned at the beginning, Cargill Cocoa Promise is sort of the standard offering that we do. It's quite a high standard, but it is a standard offering in the sense that everybody within the Cocoa Promise receives the same level of support. What we also then have with certain customers are additional programmes. For example, on agroforestry, on community wellbeing, child labour monitoring, deforestation prevention, work with women's economic empowerment, etc., etc. So we have a really wide range of programmes that are over and above the standard offering of the Cocoa Promise. They're still within the delivery model, but it would depend upon the scope and scale. So, farmers benefit from a) the productivity and profitability specific to cocoa work that we do as a standard offering. They may well be selling into our sort of broader supply chain or specifically to a customer. And then over and above that, many of them are also benefiting from additional bespoke programmes, depending on funders, depending on the customer, depending on potential investment from wider Cargill.

NZ So all that cocoa you source is in that programme, in the Cocoa Promise. And then some buyers have additional things.

RD Exactly, some buyers, but also Cargill itself has potentially additional programmes. The way in which Cargill is structured is that we have the Cocoa Promise, but then, if us within the sustainability team are wanting to trial a new idea or we apply for a specific piece of funding, either from an external

donor's funding source or indeed from within Cargill itself, and various financing mechanisms, and it may well be that in a specific area, there's an additional programme. For example, the income diversification programme that I mentioned earlier on chilli peppers. Some of that is Cargill is self-funding it and it's also additionally part of a customer's supply chain, which the customer also funds.

NZ Why aren't we there yet? What is the main obstacle on the road to that? A lot of these farmers still don't have the living come yet. Why is that in your opinion?

RD My opinion is, is that we're not good at articulating what the path is for many of these farmers, and articulating that is a challenge because a) you need very specific data and information about each individual farmer to be able to model it or to suggest the impact of certain interventions on their household income. But also, I think that there isn't enough tied up thinking around what addition is needed outside of cocoa, because as you'll have read it, I'm sure in articles or research that's been done about living income, in some situations you can double, triple, quadruple the price of cocoa. And actually farmers would still not be earning a living income. So I think some of that debate needs to be articulated a bit more clearly to understand, okay, if indeed that is not the case or understood, then then what do we need? What else can the industry do? Because the industry is actually the cocoa industry in general is very, very motivated to find a solution to this, and it's been working many of these sustainability programmes have been in place for a decade. The Cocoa Promise has been in place for decades. We're working in a huge amount of investment into cocoa-focused activities and also increasingly non-cocoa. There is not a lack of motivation, appetite and ability to invest in the right activities. I just think that there hasn't really been a clear agreement on, okay, for certain farmers, what impacts there can be on a living income from a cocoa perspective, whether that be price, productivity or yields, increased production; but then potentially for other segments, what that blend of activities looks like and an understanding that actually, for certain farmers, who may have a very small asset base from a farm size perspective, that if you look at it from an economic perspective, actually, it's pretty impossible to make cocoa alone earn a living income. Therefore, we need more people at the table than just the cocoa industry to say, okay ... let's say, for example, a farmer is producing 300 kgs or 400 kgs of cocoa a year. Even if you were to double yield and double the price, you're still not going to meet a living income benchmark from cocoa alone, whereas for a farmer with more land cocoa will make the most sense - or at least a blend of cocoa activities might make more sense. But I think it's quite a political conversation in that sense, because what we're talking about ... we're not just talking about living income. Living income is a phrase that has been coined to describe poverty, basically. So, what we're talking about is poverty alleviation in rural areas, which is something that not just the cocoa sector, but the development sector in general has been trying to solve for many decades in many, many different supply chains. I think we need to think about it through a poverty alleviation lens rather than just a cocoa sector [lens] ... "cocoa farmers must earn a living income". And as I say, there are many forums where that conversation is being had, and there are more and more organisations becoming interested in cocoa and having income and supporting the industry to think through how we can approach that. And there are many progressive conversations being had. But I think the strategies that we need to put together for different profiles of farmer, that's where it gets a little bit political, because the alternative to cocoa in many rural areas is quite limited and cocoa itself is about the most structured value chain in the world, maybe apart from coffee or tea. From a smallholder perspective, there is just so much structure and sort of a guaranteed market, pretty much a guaranteed market for production. Stepping outside of that for many farmers is a big challenge and it needs to be clear on sort of how cocoa plus others are brought together a bit more clearly.

NZ Yeah. So in the end, not looking at the cocoa farmer as a cocoa farmer, but as a person living in poverty, that needs a holistic approach to get out of poverty.

RD Yes, but also looking at it from like a rural development perspective. So, thinking about the landscape around which that farmer or that farming household is and thinking about it from a rural development perspective. So how does house cocoa fit into a landscape approach to improving incomes and the wellbeing of people living in that landscape? And what can the cocoa sector play, both from a cocoa perspective, but also from a structure perspective. For example, we spoke about access to finance earlier. How can the cocoa sector best use its situation as a guaranteed market, or pretty much a guaranteed market, for cocoa to crowd in to de-risk access to finance related players, so microfinance or banks or development finance, whatever it is: how can that situation better be used to say, okay, the cocoa industry spent decades, building up these empty structures in rural areas, supporting cooperatives, supporting farmer organisations. So, surely it's less risky for other organisations to come in and see what opportunities are also available. But as I say, I know for certain farmers or certain profiles of farmer, earning an increased price or a premium payment and some productivity, they are able to reach a living income like that. That is the case for sure. But there are others, that there's a mix of activities required, and for others maybe cocoa forms a smaller part as compared to what else. But the problem is that we're not clearly identifying the "what else". And there's a risk that there could be a perception that the cocoa industry is trying to get rid of its risky farmers. I don't think that's the case. I think that there's cocoa and cocoa-related support available, and the cocoa industry can help make cocoa a profitable business in itself. Just whether that profitability is enough to equal a living income is a different question. So, cocoa can be optimised on a small plot from a productivity and a profitability perspective. Does that equal a living income? Maybe not in some situations. Okay, if it doesn't, then we need the conversation around what else can be put together there to help those farmers.

NZ Clear. Do you have any additional input that you think can be useful for me?

RD I think it's a really interesting topic to be covering, because it's an economic and a political conversation. And I think that what the cocoa industry really needs or what it's certainly seeing is around this; these convening spaces to talk about what is working and what is not working, because, I've given you today ... I've got another 20, 40 examples of different activities we're doing, or different things we're trialling, or how we're doing things, etc., etc. Barry Callebaut will have the same, Olam will have the same, ECOM will have the same. But drawing together and understanding what works to close the living income gap, a) I don't think anyone really knows to be honest, because living income as a concept has only really been around as a phrase for the last couple of years, really; four years, maybe. Of course, as you just said, the alleviation of poverty or rural development has been around for many decades. But understanding and tracking impact, I think, is the next big stage here, where we're thinking about, okay, we as the cocoa industry, how do we understand the impact we are having on a living income amongst many different activities. Because, once we start stepping into the realm of income diversification or rural entrepreneurship or whatever it might be, we have less understanding of that as an industry. Our strength is our data collection around cocoa, around premium payments, around productivity, etc. If we're trying to think about the impact on a living income, I think that's hugely challenging for the cocoa industry in general because it's stepping outside of what we usually do and understanding what data we need to collect, how we analyse it, etc., etc. That's also really challenging. So how we draw together the impact of many different interventions to

try and reach a living income, that I think is the next step. And I don't think many people, you know, many organisations understand how to do that. IDH is supporting us to do that. There's the formula of what we think equals a living income: price, productivity, income, diversification, minus cost, whatever. But actually, how to track that at a household level is really, really difficult. You speaking earlier about scaling it: how do you scale the impact analysis of a very, very nuanced model. That I think is really, really challenging. It's not me giving you an answer here, but it's that ... You're asking: Why? Why aren't we there yet, or what's being done? I think part of the reason why no one's really clear is because we don't have that stage of the calculation really clearly defined either.

NZ That's really, really challenging indeed. I hope to get some nice results for my thesis. We'll see in a month approximately. But it's also nice to talk to a lot of different stakeholders. Cargill is a big player; I also talk to Tony's, for example, but also with smaller initiatives, NGOs. I hope to bring all that information together to get a little bit of an overview, because in the end, this is only my master's thesis, so I can't do everything. But it's nice to get an insight in in a sector.

RD That sounds like a good spread of organisations. I know Tony's have a strong opinion about certain elements of the mix and what they expect to get done. But they play an interesting role in the sector. As you said, they have a very small supply chain. And I think that as they expand their supply chain, and they get more and more farmers on board, of organisations on board, they are coming up against the same challenges that we in the wider industry have: these challenges of how you develop interventions that work on a wider scale. But all organisations like Tony's definitely play an important role in terms of advocating, pushing forward what they believe, etc., and sort of pushing the debate along. It'd be interesting to see for them, as they expand, how they evolve their approach as well.

5.10 Interview Abdulahi Aliyu, Rikolto International, 11/08/2022

NZ I obviously read the website of Rikolto, but can you briefly explain what Rikolto is doing?

AA So Rikolto is a network organisation. We have our networks situated in Leuven. As an organisation we have the vision to ensure sustainable income for farmers, affordable and nutritious food for all. And we operate around three programmes globally. So we have a programme on rice. We have a programme on Food Smart City, and we also have a programme on cocoa and coffee. So as an organisation our programmes are structured around three strategic pillars, which is sustainable crop production. Then we have the market inclusion. And we also have an enabling environment. So in terms of cocoa and coffee, we have the vision of ensuring that it's living income for smallholder cocoa and coffee farmers around the globe. And we designed our programmes around three strategic areas, the sustainable crop production, I mentioned about. And this one and the cocoa and coffee. We are actually focussing on income diversification. We are looking at agroforestry and climate change. We are looking at supporting improved cocoa and coffee production. Then we are also looking at farmer professionalization, that is trying to build stronger farmer organisations to be able to provide services to their members. Then under market inclusion, we look at enhancing quality of cocoa and coffee so that farmers can get good market opportunities. Then we also try to identify marketing opportunities for cocoa and coffee and marketing opportunities for diversified crops that are produced within cocoa and coffee landscapes so that you can link, you can provide marketing opportunities to these crops. Then we also look at creating employment opportunities for youth and women who are mostly under engaged in these two value chains. So we create opportunities through service provision. We create opportunities to access to finance. We create opportunities through employment creation for them to be involved in these sectors. Then we also look at marketing enabling environment where we talk about generating evidences from sustainable crop production and market inclusion to be able to showcase to relevant stakeholders on what we are doing in order to inspire wide scale adoption and also try to influence policies on sustainable cocoa and coffee production around the world. So basically that's what we do as an organisation.

NZ And my thesis is about the living income challenge. Which stakeholders do you think are most important when tackling this challenge and why?

AA I think for me there are two things. One is, we talk of living income, basically you talk about the farmer because they are the most deprived, if I should put it that way, in the chain. I guess you might have seen the study that talks about what has been the income distribution along the cocoa chain and you realise that the farmer gets the least. So if you are talking of living income, then you want to talk about important stakeholder in the cocoa and coffee chain. Then it is the farmer. The farmer is the most important in a sense that all these things we talk about, deforestation, it has a link with income, child labour, it has a link with income. Whatever, it has a link with income. And I give an example. If I'm a farmer in the cocoa growing community in Ghana who has a family of five and for instance, a farmer, when he sells his cocoa, he makes €200. I'm just giving an example. He gets €200, or she gets €200, which they're able to feed on that. Then in the next year, for the farmer to be able to provide the same feed for his family, he needs €300, because inflation has gone up etc.? But the cocoa price is still €200. So at the end of the day, the farmer will think of how then do I make sure I get more money to be able to feed my family? Then it's okay, why not expand our farmlands? Where do I get farmlands to expand to. We go to the forest area, it is lying there, virgin glades and established farmland. So you

can increase the volumes you produce to be able to take care of your family. So you can talk about child labour. The farmer sees, okay I need 200 euros to take care of my family this year. To be able to make 200 euro I need to make sure there is enough labour to work on my farm. If I do not have money to hire adults to work, then the child is charging me 50% of what an adult would have taken. The go and they do it. So it is all about survival. The income the farmer is talking about life is talking about survival of his himself or herself and her family. So for me, that's very important. And that's one thing that has to be looked at closely.

NZ And how can that be tackled? What needs to be done to get to this situation?

AA I think there are a lot of things that have to be done. One, there needs to be a decent price paid to farmers. A decent price is [...] cocoa prices has to be good. In order to reward the effort of the ordinary farmer. That's number one. Two, we also need to look at other income sources for farmers because, whether we like it or not. We need to have buffers. We need to create buffers like that. When there is a shock in terms of their income, even if yields are bad and prices are good and the farmer is not able to produce enough, they will still need to survive. So we need to create other sources of income for farmers to be able to have good life and to be able to attain a good standard of living. The third point, in my opinion, is also that we need to look at.. farm sizes are generally small. And farm sizes are small, but the cocoa farms that we work on also are mostly aged. So yield levels are low. So we need to really look at intensifying production practices. Because you cannot say expand, because if you expand you are likely to create deforestation. So we need to intensify, intensify the systems. Intensification means that you replace the old stock with new, vibrant hybrid stock so that high yielding varieties.. You can gets maybe twice of what you would have gotten from your old stock and from the same piece of land. So that's very important. Then we also need to look at.... I think governments generally need to work on the micro or the economic situation of cocoa producing countries. I say this because, I think in the past people were not talking about it. Because we're not seeing it in a sense that issues of inflation, currency depreciation and all those things. These have serious repercussions on the life of the ordinary farmer. I tell you, that is an intervention we are implementing and some of the farmers are not able to continue with some of the interventions because of the current economic situation in the country. And this is something, this is not the fault of the farmer. It is not the fault of the private sector person, it is the fault of the government. So the government, they need to be able to work on, to fix the economies of producing nations.

NZ So you mentioned four things: price, diversification, intensification and the role of the government on the microeconomic situation. When we're looking at these things. What are challenges are you encountering when trying to fix these problems?

AA You know, for instance, in terms of pricing. Paying better prices. The cocoa market is highly speculative. In a sense that is, okay, if we produce a lot of cocoa. Prices at the London Stock Exchange. And then would prices will drop, very likely. Then when prices drop, the global market prices drop and you want private companies to pay higher prices. There is no way they are going to pay that. They will not pay prices above the world market price because they are also into business. They work with different private sector companies. So if I have to pay higher price and company B is not willing to pay that, he or she will have competitive advantage over me. So that's just something that's a major challenge, in terms of how do we streamline the pricing mechanism of cocoa at the global level. It's a big challenge. I think the second thing also has to do with controlling volumes of cocoa that is released

into the system. In a sense that if everything is driven by volume, they say, okay, we Ghana, we are producing 1 million tonnes. Cote d'Ivoire we are producing 3 million. Then the market is okay, we already have excess. I know forces of demand and supply. The more you supply, the more demand will crash. So prices will crash. So that's another challenge. They need to be looking at supply management at the country level, see, how is this possible? How can we do these things? The third challenge also has to do with capacity of farmers. For instance, we spoke about diversification, to diversify income, people need to invest in these diversification. One, you need financial capacity to be able to invest in the first place. Most of the farmers we are talking about, do not have the financial muscle to invest in diversification. It doesn't matter the income potentials in those things. But when people do not have money to invest, then there is nothing you can do about that. The fourth challenge has to do with whether the willingness, or the farmer is willing to change. That's really a big challenge. Of course, they are willing to change. But it takes time. It's slow. It's gradual process. But that's also a challenge. Because if you want them to change to diversification, to look at these things then you need to set up a demo. You need to explore with some farmers. They need to see this is working, before they begin working towards that direction. And that is human nature. It's not only common amongst farmers, it is common amongst everybody. I know you yourself, before you take a decision, you need to really probe further to see, does it work and all those things. But that change process amongst farmers is the same. And that is one of the major challenges. These are some of the challenges that.... One other major challenge has to do with markets. You know when we look at farm diversification, we look at the produce. [...] But with these different crops if there is no market for it, you are in deep shit. So it would be a problem. Again, less women are represented in this sector. And women, when you talk of living income is a household income. It's not only the male's income, but then it is the household income. So if less women are represented, it means that the income that is supposed to go to women will also be affected negatively. [...]

NZ And when looking at the interventions Rikolto is doing for these smallholder cocoa farmers in Ghana. What implications does it have? How does it affect these farmers?

AA So we have the different interventions. One of them is looking at income diversification. So under income diversification, we work on yam. We support some farmers to produce yam, which is very good. The results from yam has been fantastic in the sense that is a food crop for the people so they can use it for food. And surprisingly, most of the farmers who are benefiting from yam, they do not want to even use it for food. They rather prefer to keep it for multiplication for the subsequent seasons. Because of the price of yam and there is also a market for yam locally. So that is good. And even if it is only for food, you realise that, food constitutes over 50% of the living income component. So even if you provide food, it means that you are contributing to over 50% of closing that gap. So that's one thing.

NZ So supporting them to produce their own food, and also locally?

AA Yes. Of course, the yam is food, but they don't even consume it. That's what I was just telling. People trying to sell it, because the market there is good for yam. So that's one.

NZ And they sell it mainly locally you said, right? Within Ghana?

AA Within Ghana. And within the communities. Besides that, we also have rice as an income diversification intervention. Let me indicate that the first year of rice was very good. Farmers were

very happy. But I think there has been some challenges in terms of climate. So rice for the last year wasn't good. But it has been a very good crop for farmers in terms of income and also in terms of food. And it may also surprise you to know that only 5% of the rice that was produced for last year was by consumed amongst farmers. The rest, they sold everything, because they were getting better price for their rice they were producing so that they could look for other rice locally to consume. Then we also have what soap making. So we support some of the cocoa farmers to produce soap. That's an income diversification opportunity. However, this year we are facing serious challenges with this. So because of the inflation. Inflation in Ghana now stands at 31.7%. So that's a lot. And you can imagine that because of that, our cost of materials inputs, everything has gone high above the roof. The farmers are not able to even purchase the raw materials for soap production. So that's one of the major challenges and that's why I was telling you that the economic management of the country is very important. Then we also have honey. Honey hasn't been too good because we started three years ago and so far they haven't seen a lot of honey from the beehives, hasn't been good. So we are monitoring on that to see how that will go. We also have pruning and spraying services where we try to create employment opportunities for young people in the form of labour services so that they provide the labour services to farmers. That is working very well and they are making money from that. They provide labour services to farmers and farmers pay for these services and that's working very well. We also have an access to finance component, which is VSLA. Which is looking at creating opportunities for cocoa farmers in the communities to have funding to be able to finance the income diversification interventions, to be able to increase investment in their cocoa farms etc.. So that is also working very well. So basically, this is how our interventions are structured. But on top of that, we also have an agroforestry component, we have a child labour component. But these are the main things that contribute to the income stream.

NZ And you also mentioned before the importance of productivity and intensification. Are you also implementing interventions related to that?

AA That's why I told you that we have permanent screening services. One thing we realise is that farmer trainings and all those things do not really yield the needed results. And the resources that is pumped into this is quite huge. So we realise that look, one of the things is that creates an avenue where farmers can have access to services. They get the services to serve them on their farms. So for instance, when it is time for pruning there is this professionalised labour service provider, who can provide professionalised pruning to the farmer. When it's time for spraying, there is somebody able to do that. And then we also do hand pollination. We support in pollinating the cocoa farms in order to increase yield or productivity of the cocoa farms. So these are the key interventions that we embark on in terms of improving yields or intensification of.

NZ And what opportunities can you identify that are still out there to increase the income of the smallholder farmers?

AA I think the opportunities that are still there have to do with the income diversification. There are still income diversification opportunities that are out there, that we need to look at. I think it is very important to look at that, to see where you can increase farmers incomes. Because that's number one. Intensification in the form of hand pollinating the cocoa farms is an opportunity area that we can look at, in a sense that most of the cocoa trees that we are aged. But with the pollination, the stronger the trunk its ability to hold on to more *port*. If you can pollinate such tree, then there would be more ports

on the trunk and it's able to increase productivity for farmers. And the other thing is to engage the private sector. To look at additional ways of paying better prices to farmers. It could be through premium payment programmes or cash transfers to farmers. And that's those are the opportunities that I think still exist.

NZ For my thesis, I've divided all the possible interventions into eight sector activities that they can target. And I'm going to share my screen real quick. So these are the eight. And you've already touched upon, I think, most of them. Is Rikolto also working with all of these eight, or are there some you are not targeting?

AA Production. Consumption, we don't work on consumption. Stakeholder organisation, yes. Regulation, we are not a regulator. So regulation is done by government agencies.

NZ But you are working on connecting different parties together to have a conversation about this, right?

AA Yes, yes. Coordination, yes. Investment, we don't invest. But we tried to see where we can create opportunities raise investments to the cocoa sector. So private sector investment, maybe financial institutions providing investment to cocoa farming cooperatives. I talk about access to finance, which is looking at supporting smallholder farmers to invest in the cocoa sector and so in other income diversification streams.

NZ And as I said, you've already touched upon a lot of these things. But I want to run through them one by one to see if there's any specific opportunities and challenges per activity. So for production, I think Rikolto is doing a lot regarding production. What are specific challenges regarding production?

AA In terms of production? The biggest challenge has to do with the resources in terms of land. So there is increasing pressure on land because of urbanisation etc.. So people are losing their farmlands to residential properties and all those things. And so there's an increasing pressure on land. So you see sometimes farmers having to produce at locations that they are not supposed to produce. So that's number one. Two also has to do with access to production inputs like fertiliser, like agro inputs for farmers. That's a major challenge for smallholder farmers. The third one has to do with adoption, adoption amongst farmers. It's quite difficult. Because when you introduce them to.. say these are the good practises. You need them to be able to continue on their own without necessarily calling on Nina to come back. And perhaps that really sometimes takes time, and that's a major challenge.

NZ And what opportunities are out there regarding production.

AA I think the opportunities are that, one, in terms of the organic fertiliser element, that area has not been fully utilised. That's an opportunity for us to build on, to be able to, one, reduce cost of production by using localised or organic manure. To also to reduce the effect of greenhouse gas emission by reducing the use of external chemicals, fertilisers on our farms. Doing this, is a huge opportunity. Other opportunities that young people... We need to be able to provide them with the needed skills to tap in order to create a vibrant labour service sector for local farmers in their communities.

NZ And then the next one is value chain development. What do you think are challenges regarding value chain development to close the living income gap?

AA In the value chain development. It's one of the things I was talking to you about. Work in different private sectors. For instance, you work with one partner, you deliver something very good and they tell, yeah we don't want you to work with this person and we don't want to work with these people. And that's a bit of a problem because one, I see this as an opportunity for us to de-escalate things. So if I'm doing a good thing with you, Nina, today. Tomorrow a second person comes to me and says, I want to do this. I don't have to repeat everything, the learning is that we went through. I need to just take the lessons that they would implement. Why not build on it and you can run with it. But of course. There are challenges in terms of peoples willingness to share information, to share data amongst private sector partners. And also competing interests.

NZ So also a lot regarding the coordination of all the actors in the sector?

AA Yeah.

NZ And how do you see the role of Rikolto in this?

AA We play the role of facilitators, with Rikolto we facilitate the process. So, for instance, we have what we call an inclusive business. The inclusive business is a core of what we do. Try to create opportunities where companies and farmers can come together to transact businesses that are of equal benefit to both parties. So under that, we will ensure that companies benefit from that relationship with the farmer and the farmers will benefit from that relationship with the company.

NZ And do you think that is currently going well, that relationship?

AA In some jurisdictions, this type of relationships are going very well. But in some, we are still building that. Because, you know, you have the problems with [...] the capacity gaps are to huge. So you need to be able to bring the farmer to that level at which he or she would be comfortable to engage with the private sector partner. So until that is done, you will still have the problem of less representation from the side of the farmer. Again, for instance, if you are bringing them together the farmers [...] it was an inconsistency in supply. So you need to support the smallholder farmers to be able to meet those requirements. But also ensure that the private sector pays the price for consistency in supply.

NZ And then regarding service provision, what are the challenges regarding that?

AA One of the challenges regarding service provision has to do with the ability of farmers to pay. Generally we look at the commercialisation of the services. You cannot have a service that is not paying for itself. If it's not paying for itself, then it will collapse. So that's the major challenge has to do with service provision, farmers paying for the services. But because of the economic situation, most farmers are not able to pay for these type of services.

NZ And what opportunities are there?

AA The opportunities are that, like I told you, there are lots of young people in the communities. So it becomes easier for you to mobilise them into service provision so that you can create employment. In areas you create income sources for young people within the community aspect.

NZ And then the next one is stakeholder organisation. What challenges are there regarding that?

AA I think this is similar to the one we discussed earlier, about value chain development. Because stakeholder organisation is the competing interests. People have different interests etc.. So organising

them, you see this person says this, than this one says that etc. But in terms of opportunity, I think that if they come together then they can form a stronger force to be able to engage better with government and all the institutions that are needed [...].

NZ And its Rikolto are also working with the farmer cooperatives?

AA Yes, we work with farmer cooperatives.

NZ And what is their role in strengthening the income of the smallholder farmers?

AA So what we do is basically, we play the role of facilitators. We work with the farmer organisation. Support them to build capacity of key staff within the organisation so that they can provide the capacity building to their members in order to ensure that there is continuous access to services to capacity for their members. And also farmers, their members, will be able to increase productivity and eventually increase the income from the support services they get from their cooperative. In some instances, the cooperative, they provide pre-financing. They provide inputs to their members to produce goodwill for their.

NZ And then the last one, we didn't touch upon, on investments. So you said you weren't investing directly yourself, but you do have the access to finance projects. What are the implications of increasing the access to finance to these farmers?

AA Access to finance is very important. In the sense that without financing, one, a farmer cannot invest in diversification. Without financing a farmer cannot invest in his own cocoa farm. So finding financing is critical to whatever we talk about as far as living income is concerned, and that's part of the ability of the cocoa sector.

NZ And if these farmers have the ability to invest, do you think they are able to invest it in something that they get a return on investment, or in the right...?

AA They do. And let me tell you, that's one of the reasons why we feel that VSLA [...]. Where farmers come together and on a weekly or biweekly basis. They are going to be contributing on each week. After three weeks, three months. Then we come together and we decide that, look, we need to have leadership. We have this person as the leader. We have this person as a treasurer. We have these employers of people who keep the keys to the post amongst others. Then Nina comes to the group and say, look, I need a loan. I need a loan of hundreds. Okay, we have it. You sign, but you pay an interest or five Cedi. So you get it and you pay the interest which remains with the group. And the money that is paid would be seen from other members is revolved within the group who also provide loan to them. So that's how it works.

NZ Any opportunity still out there regarding investments?

AA I think there are a lot of farmers who are still not having access to this type of structures. And even beyond that, those who have access to these type of structures are mostly left on their own by the opportunities that there are financial institutions in Ghana in the area. And this is an opportunity to link them up to financial institutions. So that they can form a conglomerate of financial institutions and provide financial services to different cocoa farmers in the world. This could mean that the farmers can negotiate for better terms of products. They can even have alliances with the likes of Rabobank.

5.11 Interview Daniel Otu, KOA Impact Ghana Ltd, 11/08/2022

NZ. And so you're working at KOA. I've obviously read the website, but can you briefly introduce me to what KOA is doing?

DO I think it's about challenging the status quo. We realise that there are parts of cocoa which still contributing to food waste. And having effects on the environmental sustainability. So KOA decided to valorise the cocoa pulp. Seeing that this was going to waste. Paying the farmers accordingly to the amount that was extracted. So currently KOA has been in the system for five years. But in terms of operations, it's been almost four years. KOA is located in Ghana with a mother company in Switzerland. It started in Ghana but then the company was absorbed by this Swiss company. Currently our capacity is around 400 metric tonnes per year of pulp production. We're building a second factory which will be able to do up to 2500 metric tonnes a year, which is supposed to be in operation by February 2023.

NZ So you're scaling up, that's very nice to hear. So my thesis is about the living income challenge. When looking at this living income challenge for the smallholder cocoa farmers in Ghana, which stakeholders do you think are the most important?

DO So as I said, the living income apparently is very broad. A lot of companies try to touch it on different multifaceted. Like the LBCs, the Licensed Buying Companies, they try to match it on sustainability parts. We try to touch it on where no one has touched before, and that is the cocoa pulp. So currently to us, the people who matter are the farmers, that are the stakeholder that we deal with. Of course in Ghana, the cocoa belongs to the government instance called Cocobod. So we saw they also are also a stakeholder that matters. We are now dealing with them. But we do it directly with the farmers.

NZ And are you also working with cooperatives, or are you in direct contact with your own cocoa farmers?

DO So in Ghana, cocoa farmers are either smallholders or, they are usually family businesses or something. So you work directly with a farmer. Unlike other countries, where is operational farms and that stuff. But Ghana is usually smallholder farmers.

NZ And so you are using the pulp, which is quite new, right? And how does this affect these smallholder farmers and their income?

DO All right. So he got to this thing, it is going to waste. KOA decided to set a benchmark price for it. So currently we pay up to 30% per metric ton of cocoa. That's how this.

NZ In addition to the regular price for just cocoa. And what challenges and risks do you encounter in this process?

DO Well, there's a lot because we are working with smallholder farmers, unlike in Europe where farms are linear, rules are good. So it is easier to assess all those farms. Here you realise that the farms are scattered. They are no rules leading to the farm. And you want to extract this in the purest stage, before fermentation. So risk of fermentation is very high to do this. And so that's one of the risks. That means that we need a lot of logistics to be able to gather a lot of material from different farms. Currently, we work with 3200 farmers who have over 4500 farms. So a farmer can have about two or three cocoa farms. So to arrange all these people from different communities, about 80 communities, to plant production is not easy. So that's another challenge.

There have been a lot of promises to farmers and cocoa. So when you are also the new one you are coming in. They show that it can also be one of those promise and fail thing. So they are very sceptical about this. So to win trust of farmers is not easy. Unless someone joins, they see the progress, before you also join. In Ghana too, as I said, cocoa is a product of the government. It means that once government puts in regulations or decides to stop us today, then we are in trouble. So these are the risk involved with it.

NZ So the government really has the power to say, we don't like this concept, it's over.

DO Yes. Every cocoa tree, bean... everything is for the government. And the government can do what it likes with it.

NZ And how is your relationship with the government?

DO Currently our relationship with the government is good. We started trying to regularise our provisions with the government. Doing a lot of this together. It's good until maybe something bad happens.

NZ And what opportunities are out there regarding closing the living income gap for you?

DO Well, the opportunities are enormous. Currently we employ over 90 people in this place. So that is an opportunity for groups in unemployment, the farmers even have an ability to have training on agricultural practises and co. Which they also tend to improve their farms. And because they get extra income, their affinity for farming is very high. Now, okay, let me go to my farm. I could get money here and get money there. So that it is also to the farmer. To us, we also get a product that we are able to sell on the markets. Brilliant new products, ingredient developments on the world of gastronomy. Everybody likes a new taste, so that is it. We also try to bring in a lot of innovation to the world. We also use solar to do this extraction. So it means that we are able to attract good investments. So that's to us also.

NZ For my thesis, I've divided the sector into eight activities that interventions can target. And I'm going to share my screen real quick. So these are two eight. And I was wondering, does KOA try to target them all, or some in particular?

DO So we talk about all of these, I believe. We will have something to talk about all this. So that's what we should do.

NZ Okay, great. So I want to go through them one by one and see what you're doing and how it's affecting the farmers, if that's okay. So we'll start at production. So, I think it's quite obvious, you are trying to get the farmers more income by using more of their products. And what challenges are there regarding this production side of the living income story?

DO Okay. So with the production side of operations. Cocoa is a seasonal crop, so it means that it's not all year around. So the other times there is no cocoa related production, which means that the investment will have to sit idle for a year. So that's the challenge. Secondly, during the cocoa season and that is where it is also a rainy season, link the Netherlands, it rains every day. So at that time it also gets muddy. So when they are moving along it is very difficult to get to the farm land. And when it is raining the farmers also have difficulty in breaking their pots, because then rain gets into the cocoa itself and then it gets diluted at whole. So this a challenge for our production.

NZ And what opportunities are still out there regarding the production to close the living income gap?

DO So the opportunities. First, it's about giving the farmers training. So, you know, farmers are sometimes not susceptible to change. They want to use the old method. But because of our intervention, trying to reduce pesticide residue in cocoa and the likes, we need to train them in all this on hygiene and everything involved with this. So this is an opportunity also for them to learn new stuff. We also offer the opportunity to get extra income, an opportunity to also transport their beans from the field to the house closer. Which proves that if you are not careful because cocoa is of also a very hot commodity in Ghana. If you try to do fermentation or drying the field of the farm and you are not careful, somebody could steal it. So if you do this close to your house you would have a good overview of it. So this is an opportunity for the farmer since they have to pay for transporting the beans from the field to the community. The farmer also tends to have an opportunity when we do this vision of free chemicals to use and also pollination activities, with pollination we are able to increase yield massively from 50 to 100% yield increase because of the artificial pollination. So this are all the benefits that the farmer derives from working with KOA, apart from the 30% extra income they gain from selling their pulp to us.

NZ You said that regarding these trainings, sometimes farmers are a bit hesitant to change. How are you trying to convince them to participate in your programme or to get them to these trainings?

DO So our system is that if you are not trained, you can't join us. So that is a select selection criteria. So because of that, the farmers knew that they had to do it. And we also do field monitoring. So whatever is trained, it means that it has to be adopted on the field. So if you attend a training we have to see it on the farm and we train you on the field. So this is how we are able to get the farmers do this.

NZ And I can imagine that once more farmers get into the programme, others see that it's working and then they also join, right?

DO Exactly.

NZ Then moving on to the next one, which is value chain developments. How, how is KOA working on value chain development?

DO So with the value chain, obviously, there's a lot of potential for cocoa. What everybody knows about the cocoa bean [..]. So currently we are developing this and trying to create the chain from the farm to the consumer. What we do doing is much as sustainability concepts, that we are able to trace our products from the farm to the consumer. So because of this, we are the first food company in Africa to introduce the blockchain concept of payments, where when we do the payments, obviously the... Anywhere on the world, if you go to our website, if you have the key, you could view how much money you paid to the farmer and how much you are consuming from this farmer. Giving you some ideas on what you purchased. So that's also about the value chain development. We are also now speaking to some customers to be able to incorporate the powder into chocolates. We have that already with Lindt. Because they are expanding and want to do more. So to be able to combine the bean and the pulp from the same farmer to make chocolates. What we call the whole foods chocolate. So this are the value chain developments that we engage with.

NZ And which opportunities are still out there regarding that?

DO Opportunities, [also because the cocoa and the cocoa beans and a 25%]. It means that the cocoa has [...], it is on top. You look at the placenta, also in the middle, it is also on top. So these are all the things that we still have to look at and then work with it. So that the farmer would still get more income than what they are getting now. So these are all the untapped potential at this point.

NZ And let's move on to the next one, which is service provision. What is KOA doing regarding service provision?

DO So for service provision. KOA wanted to see how we could capitalise on service to this proud about engagement with the farmers. Good agricultural practices, so the Cocoa Health and Extension Division engages the farmer, trains the farmers on this. And KOA is now providing the sustainability programmes for the farmers. So it means that by large, we have provided services to this. So we wanted to either market it to help us fund our production. Or at this point, we have done it for free. In terms of knowledge, sharing our knowledge and others. We are also trying to train other cocoa cooperatives in other part of Africa, Ivory Coast and the likes, to be able to do this, use and pulp harvesting to improve their lives.

NZ And what challenges do you encounter in this?

DO Well, as I said, it's always difficult to change things which are very old. Like Cocobod, which is the government agency. They have their way of and they have this stuff. And we are have new young forms to.... We have our improved way of doing stuff. More refund. data has to be systematic for other farmers to be able to adapt, or indeed for Cocobod. To say, okay, we now approve this. Because then automatically the farmer will say, you are teaching something which is new to us, different than what we are used to. So that process of change actually has been a challenge. Sharing knowledge also with other companies. As you can see, there's also a lot of investments, a lot of know how that has been used over the years with probably a start-up company where people think that are underpaid to do this. To be able to share your knowledge, there has to be some form of investment also into the people to be able to live a good life. And I think that is where we sometimes have a challenge, how to do it for free for people who cannot afford. Because when we do it, it's like we do it for the big corporations. And the big corporations, I think, should be able to pay for some of the services.

NZ And which opportunities can you identify regarding service provision?

DO First one is about improving the cocoa yield. So if a hectare of cocoa could do almost two tons or something like that, or 4000 kg and it is less than maybe one quarter of that. It means that this is a service that could continue. We also provide carbon sequestration, reintroduction of carbon into this [...]. we could provide that. Currently, we are doing a lot into [...] trees, which are also about improving the agroforestry. And so these are services that we could provide for other cocoa or chocolatey manufacturing companies who want to improve their sustainability programmes regarding cocoa production.

NZ And I think we'll move on to the next one, which is consumption. What challenges do you encounter regarding consumption?

DO Consumption of the products?

NZ Yes.

DO So we are always under capacity. The demand for our products is more than what we are able to supply. So consumption rates is very high. Currently we do most of our marketing in Europe and Asia, we are yet to launch our product in Ghana. So this year we are on the capacity of half. So that's the challenge for us.

NZ So the demand is exceeding the supply, which I think is really positive as well. Right. So the challenge is more into getting more farmers to join your programme and scaling up? Or why aren't you meeting the demand?

DO As a start-up it's about the capital to inject into the whole project. To scale up ten times or five times, it means you need to do built multiple factories. Because when you try to do extractions and then bring it to oil factories, you need a lot of logistics, technologies to be able to do this concept. So it's a bit difficult with logistics and the partnerships. You need a lot of money to carry out this.

NZ So it's more in the factories and the capital. Are there enough farmers who are willing to join or is that also a challenge?

DO So there are a lot of farmers who are willing to join us. We are going into this major crop season from September. There'll be a lot of farmers that will already be able to take a quarter of their product. Because they cannot process everything the same day.

NZ Well, it's great to hear that it's such a success on the demand side, at least. And so which opportunities are still out there?

DO So let's talk about CO₂ harvesting. This is one of the things that most companies in Europe, I suppose, do it. Which obviously hasn't transferred to Africa yet, so there's a lot of competition for that. And since we are also pioneering that here in Ghana, it means that all of this cocoa or chocolate manufacturers will have to knock on doors to be able to do this. Apart from that, it's about youth training to be able to also do food processing and the like. Because now we offer the opportunity for young people to be innovative in the field and to be able to challenge the status quo.

NZ And I think we can move on to the next one, stakeholder organisation. Which is mainly aiming at cooperatives or other ways of organising the farmers. What is KOA doing regarding this?

DO Stakeholder organisation, we actually do not work with cooperatives. Because with cooperatives, everybody in the community can join. Some of the farmers farm beyond our reach, maybe where we can assist with our tricycles in their lives. So because of that then a farmer in the cooperative cannot join, which they usually don't like. So we usually, inform the whole community, whoever has a cocoa farm and wants to join, they are free to do it. So we do our own organisation, we do our own planning, do our own training, we do everything ourselves.

NZ You are sort of our own co-operative in a certain way?

DO Yes.

NZ What challenges do you encounter in this this process?

DO Farmers usually have different mindsets when it comes to organisation. Because to them, they have usual way that they go their farm to do this stuff now. Telling them that when they are breaking cocoa, they shouldn't do this, they should to that, they should wash their hands. This has to be difficult

for some. So that's one of the challenges. The second one is when someone cannot join they get frustrating. Because my farm is on the bank of the river that's a tricycle, a car cannot come there, a truck cannot go there to bring this crop. So it's a challenge. Also, usually some days in Ghana that you have, let's say, it's quite an important ceremony. And when we are in such a community, you cannot do an organisation unless that thing is over. So this happens that hampers the organisation of this.

NZ And any opportunities that are out there regarding stakeholder organisation?

DO The opportunities, being able to harmonise all this. Because, let's say, we will do our organisation and others also do this organisation, LBCs also do their organisation. They would do farm mapping and other LBC will do a farm mapping, another will do farmer mapping. So the same farmer will have to do two or three activities. Which probably, if all this is aligned, we spend a less amount of money. Because then all the people who want to do this farmer mapping will join forces together. And spend just one amount of money to do this. Farmer training on good agricultural practise is done separately. So those are all joined together, so that we don't spend a lot of time giving the farmers different kind of information at different times and then they get confused.

NZ And then we'll move on to regulation. Did you say you're also working on that?

DO Sure.

NZ And what are you exactly doing regarding regulation?

DO Well, you know, the cocoa pulp that's important for the fermentation of the cocoa beans. So if you take everything around the cocoa beans, than the beans are not good to ferment, than we can't have chocolate anymore. Probably we are able to do this well. And as the first people also to do it. If you don't put measures in place, somebody comes along that just washes the pulp of it and is not able to ferment. At a time, the regulator comes and says, okay, stop everything. That's the end of all these things, the annual investment. So that is why it is important to put standards, regulations and all these things in place. So that whoever is joining in, know that, these are the things I have to meet, procedures I have to meet to be able to do this.

NZ And regarding coordination, what challenges do occur around that?

DO So we have a lot of coordination with other LBCs, because some of them want to buy directly from our farmers, the beans. So to be able to help develop the communities, then we have to join forces. If there is a break in a community that makes them inaccessible, then we see how we are able to do that. But currently the cocoa sector is almost like everyone for himself, people are trying to do their own thing. So this makes it a bit difficult to do this coordination. In terms of us with our customers. We have a very similar problem with that system. If there's [...] with our farmers, there is also [...]. But when it comes to other stakeholder within this system. That is where coordination is a challenge.

NZ And what opportunities are out there?

DO So apart from Cocobod, who is so much like the mother of all the industrial players. The industrial players themselves are not able to come forward together with initiatives to help either their business or the farmers. So if the risk and the body regulating it, which is not merely governments and it is solely private, some of the discussion would also be put forward together to be able to, you know, regulate activities, help farmers and then help the issues in total.

NZ And then we are at the last one, which is investment. What is KOA doing regarding the ability for farmers to invest?

DO This is a difficult one. To invest in their farm or to invest in...?

NZ To invest in their farm, invest in their product.

DO For KOA if the farm investment... The Cocobod, they do what we call the farmer business school, where they train farmers on how to manage capital or funds, that they get from selling their beans and others. Usually a farmer with money, it's usually destroyed. Likewise, when the money comes and he has different plans. So what KOA actually does, we also try to encourage them to put their money to good use. To either invest in their farm or invest in the activities, or the children's education. So if you look at how they receive this investment, outside groups put in place all students in their community somewhere. So, it means that we advise the parents to invest their money into the education of their kids and also into their farm, [...] events or once.

NZ Okay. And in general, if you look at the farmers that are participating in KOA, what do you think are the main implications for them and their income?

DO There have been a lot of success stories. Some are able to open a spot. Some are also able to buy a solar panel on their roof. Some have also been able to expand and maintain their farms. Some also talk about using the money to pay fees to [increase the lights for the kids and the act] The usual ones also have a lot of disposable income now.

NZ Sorry, I didn't catch the last part.

DO Yeah. The usual ones get a lot of disposable income now.

NZ Okay. I think those were my main questions. Do you have any additional input you think can be valuable for my research, that has not been discussed yet?

DO Okay. So it's about the farm sustainability.

NZ Well, it's that my thesis is about the living income challenge. So, closing the income gap.

DO Okay, living income. For us, what we look at for the level of income is usually a single. It means that the gap is smaller than when you have three or four people in your household. We try to collect all those data: their age, and all those, and that of their farm and whether they do any other kind of business in addition to the farm so that you don't have a single stream of income coming in. So, if we do this, then we know that, okay, if we do our extrapolation, one person is entitled to this amount of money and this is what is coming in. Then whatever we are giving on top might not be enough. So that is usually how we do a living income study. We do the basics, and then for the [Farmer Janaki Group], for a farmer who has joined our group, and we haven't yet gone to the farm to have a single pay; and then a farmer who has been in the programme for a time, then we're able to evaluate and see how our programme has been beneficial, how it closed the living income gap or how it does it have any effect on anything.

NZ Yeah. So you're monitoring this on a farm level, on a household level?

DO On a household level. But also that community involvement might not be the same because some communities, because of the high participation in the programme, they tend to spend a lot of money there, because then it's like your annual production, you buy almost like 500,000 use of pulp, then it means that you have some communities whose output is really high, so they tend to spend a lot of money there. So, it means that that community has a lot of disposable income or a good living income more than other communities. So that when we take the date, we realise that the value for the community.

5.12 Interview misses van Roekel, Beyond Beans, 12/08/2022 – translated

NZ And as beyond beans, do you really aim to increase the living income? Or is it more the different pillars that contribute to it, and that the living income is added a bit that way?

vR Well, living income is of course one of the most important, if not the most important, element in the sector. But there are a lot of abuses in the sector, if you look at it that way. There is of course the problem of child labour and deforestation. Those are also two very big issues within the sector. Living income is also a very big topic now. But I would say that, that has received a little more recent attention. And the other two, deforestation and child labour, have of course been a hot topic for quite some time. So that's why we've aligned our departments on them. But we actually also have an extra department and that is living income. And that is not quite official yet. But it will be an official department within our organisation before the end of the year.

NZ Of course, this concept has really emerged recently. And when we look at this living income challenge, which stakeholders are most important in tackling it?

vR Yes, everyone in the end. I mean if you look at the farmer level. For them the interest is the biggest of course. They play a role, but the whole chain up to the consumer. Everyone has a role to play in that. Because of course it is about prices, market prices. It is about consumer awareness. It's also about things like market access for farmer level and so on. There are so many different factors in living income. Actually sometimes in living income just everything together. So I would say that there is not really a specific stakeholder that is more influential or more important than others in this.

NZ Ultimately, of course, this is a very integral issue. And what is the relationship between Beyond Beans and the small cocoa farmers? Is that a direct relationship? Or how do you go about it?

vR I think we are a bit different from maybe Tony's in that. We work a little bit differently than say a big company like Cargill, or other big companies, Ecom, Olam. In Ghana, I don't know if you know a little bit about how the sector is structured in Ghana, and how it is organised with LBCs etc.?

NZ Yes, fairly yes.

vR Many of these large organisations have their own LBC. So in Ghana you have to have an LBC, or a permit, to be able to buy cocoa. Because everything is owned by the Cocobod. As beyond beans foundation, or as ETG, we don't have a permit to buy that. And that is actually a conscious choice, because that way we work together with local LBCs. They have actually had a good relationship with the farmers for years. Since the beginning that we have been working in Ghana, since 2016, we have been working with the same two partners. Who have the direct relationship with us farmers. But I must say that this is slowly changing a bit. Meanwhile, we have grown so much that we also have our own field teams that are in direct contact with the farmers. So I would say that there is not much difference anymore. I would say that the relationship with our partners is so close that sometimes it is difficult to distinguish which people belong to which organisation. So in this way we work very closely with the farmers.

NZ Yes so those LBCs are from local parties and you take their beans basically?

vR Yes.

NZ And when we look at so closing the living income gap. What is ETG and Beyond Beans doing to close it?

VR At farmer level, anyway, we do quite a lot of activities. So we focus on farmer training, for example, on improving productivity. Then we work... I think you've undoubtedly read studies that emphasise that it's difficult for smallholder farmers to make a living from cocoa alone. And so those are also things we are looking at, are there other income opportunities either linked to cocoa, or completely different sources of income. So that's something we're working on. We have our own VSLA programmes, in which we have linked a lot of training elements. Empowerment of households, especially women. To make a financial planning, so actually a kind of simplified version of a household booklet. Okay, this is what you want to achieve, what do you need in terms of resources and how do you get there and how do you organise it? So that is simply what we do in those training programmes together with VSLAs. Let's see, what else do we do? We actually have more programmes outside Ghana. So that's for Ghana, which is what I'm thinking of so quickly. Maybe some more will come up during this interview. In Côte d'Ivoire, we have a very large programme, also financed by the Dutch government, which focuses on living income. And in which we investigate what the different pathways could be. One issue within living income is that actually nobody knows how to deal with it or how to solve it or what actually makes an impact on improving living income. There are a lot of ideas and a lot of loose things. But how can you indeed have an integrated approach that creates impact? And the Enroute programme is looking into this. So there are actually two pathways. One is to say, okay, we give farmers cash transfers without conditions, so they can spend them freely. And another group receives service packages. So there are a lot of different elements in it, farmer training, VSLA, all kinds of service, neighbour groups, you name it. So what is the difference in impact? Is there a difference and should we indeed focus more on certain aspects? That programme is really very detailed. So there are a lot of elements in it, but I think it falls outside your scope? Because it's about Ivory Coast.

NZ Well, interesting to look at. And how would you say your cooperation with other parties in the sector is working on the problem?

VR Well, it's interesting that you're going to talk to Cocobod, because I think they're going to have a very different perspective. Now I'm mainly talking about what we do at the farmer level. But of course, as I said before, there are also the stakeholders on the other side. So market prices are also important, of course. And as Beyond Beans and ETG, we don't really have an influence on that. In Ghana, of course, it is regulated, so anyway the farm gate price is just set by the Cocobod. So that is not something companies have an influence on. Of course, the farm gate price is also somehow related to the world market price, if it is not up to Cocobod. That is, of course, what the big chocolate makers do have influence on in principle. To a certain extent, of course; ultimately supply and demand determine the price. I think that perhaps the chocolate maker plays a bigger role there. And Cocobod of course tries to influence that. You've probably heard of the World Cocoa Foundation. I think it's a party that does a lot of coordinating and tries to get the private sector as much in line as possible. And they do that with conferences and platforms and so on. So that is something we do contribute to. In principle, we do a lot of knowledge sharing. Do you have any concrete examples?

NZ No, I was just curious, how from your perspective, how that goes the coordination.

VR I think what is good to know is that the cocoa sector is actually a relatively small sector. As in, there are few companies. And of course a fairly limited area of where you have cocoa. So there's a lot of

competition. And that's not always to the advantage of working together. And this is where you slowly see changes. The World Cocoa Foundation is very much taking the lead. But I would say that it is not very well developed in this sector.

NZ And so you have various programmes to work on this, so the problems in the sector also concerning living income. What are the big implications of that for the small cocoa farmers?

VR That is a good question. I think that is a question not only for us, but for the entire sector. There just hasn't been a lot of research into what exactly the impact of activities is on living income. Or at least not on a large scale. And that also applies to us specifically. So we are working on it, for example, with the programme in Ivory Coast. But in Ghana, we don't have specific data or results on what exactly the impact is in a quantitative way. We do have a lot, more in the form of farmer stories or just experiences, that we hear. Of course, we hear a lot of positive stories. For example, the VSLA programmes that, on the one hand, provide access to finance. But there is also a lot of capacity building through all the tools and training that we offer. And we see that as a result, a lot of farmers are able to invest in their own business. It is not always the cocoa farm, but often the side business, and especially that in which women work. That is where a lot of success is achieved. So households that... There was a household recently that set up a chicken farm. He built two big barns and has a lot of chickens. Now he has a new income stream from that. We also have examples like that, but we don't have it in a quantitative form at the moment.

NZ But overall, do you feel it is positive?

VR Yes. Only, of course, the question is.... Look, of course you often hear these positive stories, but you don't always hear the stories that are perhaps less positive. Or people who have benefited less. And that's interesting to see, of course, who benefits most? And how can you best reach the people or the farmer who is most in need. And that's something we try to pay attention to, of course. But of course, there is still a lot to do.

NZ Okay, there is still a lot to do. What are challenges you face in so trying to improve the living income of the small farmers?

VR Good question. I had already mentioned the biggest challenge, of course. That there is, of course, limited research on what actually contributes to improving living income. That that is now such an important issue, perhaps more at a lower level of incentive. On a lower level perhaps..... I think I mentioned most of it, which is kind of the challenge, also lack of coordination is definitely also a limiting factor.

NZ And how do you think you can reach all the small farmers with your programmes?

VR Well, of course we are limited by our supply chain. So that anyway. I think as Beyond beans we do try to make sure they have community initiatives. So actually... The traditional approach often are, especially by the NGOs, that they are really projects. So you have a start time and an end time. And that is certainly less for our organisation. For us, they are programmes. We do have projects, of course, but in principle they all continue. One example is a VSLA. For us, that's one of the most important initiatives we do in the field. And in principle, if you just give good guidance and training to that, then that is something that can continue in eternity. So we invest a lot in that. And we also see positive results. But I think that also shows how important it is to really leave that ownership at community

level. It is good to provide the tools and the training, and then communities can pick it up themselves and develop it further. And I think that that is certainly very positive. But it is too ambitious to say that this is possible for everyone. It works the same way in Europe, of course, that you are dependent on the support base within the communities. People who take the initiative at community level. The moment a community is passive, fewer things take place there. That has to do with leadership at the local level. And of course, that's also important. So in that way, it can be difficult to reach everyone? But I think about time, definitely.

NZ And are there any other possibilities within your reach to reduce the living income gap.

VR Yes, I always think. Look it's not a static thing, so it's a learning process for everyone. We always think of new initiatives that we can use based on experiences we have ourselves, but also what we see working well. For example, in other sectors, and with others. So innovations. And that doesn't just apply to us; it certainly applies to other companies as well. Tony's is also very active on this subject, of course. So there are always new initiatives to find out what actually works. For example, they have also started to produce cocoa juice. You may have heard of it, Kumasi Juice, since 2019. So that's an innovative project to really get more income for the farmers. Without too much investment at farmer level. So that's just potentially a very nice initiative to improve income. And in that way, I think you keep getting new initiatives that can contribute to that.

NZ Great to hear. And it is indeed a learning process, also with the whole sector of course. And there is more and more research, also on the subject. For my thesis, I divided all interventions and actions into eight sector activities that they can target. I'm just going to share my screen. We've covered anyway, I think most of them sort of. But these are the eight, and I was wondering if Beyond Beans works with all eight or some not?

VR Let's see, I think you have to explain some of them. Production is clear and I think I mentioned it. We do of course extensive farmers training. And have both just basic training on what is pruning and best practices on the farm. But also on agroforestry, which of course improves production, as well as quality. We do a lot on that. Value chain development... Let's see what you mean by that. Whether you mean initiatives such as Cocoa Juice, for example?

NZ Yes, so things like traceability, efficiency, but also changing the value chain. So kumasi juice, I think, would rather fall under an extra source of production... It's just a model, of course.

VR Yes, I think that's a bit tied up with being a supply chain player. Yes service provision, I think I've given enough examples of that as well.

NZ And those trainings for example, do they work well? Do you think the farmers are actively working on it? Also in the longer term.

VR Yes, definitely. So what we do as Beyond Beans Foundation, everything is certified. All our cocoa that we source within Beyond Beans in Ghana. And as part of certification, there are just a number of criteria that have to be met. And so those criteria are much on best practices. There is also an expectation that this will simply improve. So your first year certification is different criteria than your third year certification. So I certainly think so. We also do extra training. I know a little less about that, I'm not the one who deals with farmer trainings. But if you look at agroforestry, so actually planting other trees on the cocoa farm. Making sure there is enough shade... I think that is more of a mixed

success. But that is also part of certification, so there are certain criteria. But well, basic criteria don't mean that it's the best there is. So I think that's fine, but it can certainly be an improvement. In general, farmers are very interested in training and farmer training in order to improve themselves. Ultimately, of course, the farmer also wants to increase productivity. So there is certainly a lot of interest. But it is often limited by lack of labour or lack of funding to buy inputs. And so that's where the service provision comes in.

NZ And those trainings are mainly delivered through that LBC? Through their people?

VR To a large extent, yes. So I would say, just focusing on farmer trainings would not improve the living income gap. In that, just the service provision piece is important, access to finance, access to inputs, availability of labour, all those things are just pretty essential to make the trainings successful.

NZ Do you also do something with income diversification?

VR Yes, we also work IDAs. So cocoa juice, for example, is also a form of income diversification. But we have also done programmes with other farmers who were more involved in a non-cacao element. We have had IDAs that focused more on improving nutrition. Think of growing mushrooms, edible mushrooms of course. Also honey. This was a few years ago. We also work with a partner, The International Cocoa Initiative, in which we have IDAs that focus more on the common crops, so for example oil palm is a big crop here, in addition to cocoa. And they make oil from that. So, for example, we have also helped communities with equipment to make oil from it and to attach a business case to it. And there are more examples like that. So we certainly do enough activities in that area as well. And indirectly through our VSLA programmes we try to promote that. So not yet, we are working on that, but in principle we are not investing directly in that. But we are trying to ensure that farmers themselves take ownership. The VSLAs can invest in setting up an IDA through access to finance. We are looking into whether we can provide more support in terms of training. We are now looking into whether we can, for example, make extra, somewhat larger loans available to them, so that they can make larger investments. So those are nice things.

NZ Are there any difficulties you face in terms of income diversification?

VR Sure. An example, one of the communities that got a mushroom IDA, supported it. That actually went really well. There was a very good harvest of mushrooms. Of course, they were trained to sell that. And that bit about market access, on which market are you going to sell it, at what price, etc.. And that type of mushroom was seen as a delicacy. And in the end, the community itself found them so tasty that they never sold them and therefore did not make any money and were not able to invest in order to continue this for the next year. And I think that shows a bit what the challenge is. You have to invest in something in order to let it continue. So perhaps a little bit of dependence on farmers sometimes. The fact that things sometimes come for free. Ownership is sometimes lacking. But there is also a lack of market access. I think that in the past, we did not always take a good look at this, we train farmers on this, so that they can often choose what they would like. And if you go to a community and ask what would you like to be trained in? Then a lot of examples come up. And then you can say 'OK, that's what they want, so we'll train them on that'. And then we'll see if there's a market. That is actually a bit of the approach that has been taken for years. But then you get communities with ten soap makers, for example. Yeah, who are you going to sell that to? So now you see that that has

changed and that the market excesses are examined first before a decision is made about where training should take place.

NZ And I think difficult indeed to find the right product to start producing.

VR On the one hand, it is of course important to give the farmer himself the ownership and to let him decide what he wants to work on and invest in, of course. But on the other hand, it is important to provide guidance. And to be careful not to make an investment that ultimately benefits no one. Because even if you train people in soap-making, for example. In the end, the farmer's investment in that is also in vain.

NZ And what about stakeholder organisation? Do you do anything with that?

VR I think we had discussed that a little bit? What exactly do you mean by that?

NZ is mainly about farmer cooperatives and the dominant position of the farmer in the value chain.

VR For Ghana, however, that is a difficult issue. Because the Cocobod.... Yes, you can give the farmer more power, but more power in what? Price setting, the farmer just really has no say in that, and neither do companies really. But in terms of what kind of programmes they get and what kind of initiatives are important to them, instead of top-down decisions, they certainly do. So we do community needs assessments with communities. And we bring together different groups within communities to see what your different needs are. So that can be, well, a bit like the community leaders, who are often older men. Other groups, women, young people, minority groups. And you collect all these needs and then you actually make an action plan of, what is important and what are the priorities within your community? So we definitely do that. So more on a farmer level. At a higher level, it is just more difficult.

NZ And what impact do such interventions have?

VR First, of course, create more ownership. I always find it a bit ambiguous. But community needs assessment, what you often have to watch out for is that it becomes a wish list. A kind of Christmas gift list. And that is always a bit of a risk with needs assessment. But the moment you do it right, you get a list of really high-priority needs. And that don't just depend on huge investments. Think, for example, of what some communities call a hospital or a new bridge. Of course they are very important, but they are often such large investments that actually have to be made by the government. The moment you do it right, you get those things on your list as well. But there are also things that require less investment and where the community can take more ownership. An example is what we call community bylaws. That doesn't actually require any investment at all. And that often comes up as something that comes out of a community action plan. Community bylaws... So of course you have the national legislation. But in addition to that, you have all the chiefs here with the local community. And they also have their own regulations. And they can officially agree on many things in a community. How do you deal with child labour, for example? And a community needs assessment and action plan like that can provide a lot of guidance for a community to take ownership of it, without being dependent on us for improvements. So it's a way of bringing everyone together. But also a way to reduce dependency, in my opinion.

NZ So very much the balance between giving them the right things that they themselves find useful, and therefore having ownership of the projects?

vR Yes, just to avoid that it is always external parties who give things for free. You see that a lot here, farmers waiting for free things. And that is just not very helpful in terms of sustainability.

NZ So that is not a good long-term strategy?

vR No, in my opinion.

NZ So that was stakeholder organisation, we had deviated from it a bit. Regulation... Are you doing anything with that apart from the Cocobod holding a lot of power?

vR What else is covered? Because with price regulations, the answer is no.

NZ Yes, indeed more that corner. So that's not it?

vR No, because we are really more of a middle man in that sense.

NZ And coordination, we have just been talking about that too. Do you have anything else to add?

vR Hmm, specifically on living income....? I think I said it already, we do a lot on knowledge sharing. We have already held a number of conferences on this subject. In Ghana, I think this is more a subject that we do at head office. In terms of coordination in Ghana, a little less. I would say that it is more via the World Cocoa Foundation and that we do contribute in the sense of going to stakeholder meetings. As far as I know, there has been no specific meeting on living income in Ghana, for example. One that was really organised for implementation. However, there has recently been a meeting on price setting, for example, on the living income differential and industries that must do more for the world, to improve the world market price and so on. But we as Beyond Beans do not participate in that. But more lower-level events that we would be invited to. I do not remember that this took place in Ghana.

NZ And do you think that would be useful, that it could contribute something, such a meeting?

vR Yes, definitely. At the moment, just knowledge sharing is very important. Just to get a picture of what are indeed different pathways. And what is everyone doing in this area and what works and what doesn't? How can we cooperate in certain areas and that you don't work past each other. I mean, there is a lot of overlap between the areas where we work. So certainly a lot of potential for collaborations. I think that would definitely be good.

NZ And then the last one, investments. We've already talked about the access to finance projects and the VSLAs. Do you have anything to add here? Things that are difficult, or opportunities?

vR No. I think in the end what would be interesting for improving the living income, is of course making farmers bankable. So VSLAs are the first step. So that's really ensuring access to finance at community level. And although the sums involved are substantial, they are probably not the sums needed to set up something really beautiful and big, for example. So ultimately, of course, you want farmers to be linked to real finance institutions. So that they can get larger loans to invest. And that they can also make use of other services. So through the finance institutions you can of course also use things like insurance or inputs on credit etcetera. So that is a challenge. I think the first steps have already been

made in Ghana, but there is still so much to do there. So we are working on that too, to make progress there.

5.13 Interview Michael Amoah, Cocobod, 16/08/2022

NZ When we talk about this living income challenge that is currently out there, which stakeholders do you think are most important when trying to tackle it?

MA Well, in terms of living income, you have to talk to the policy makers, which is Cocobod. And you have to talk to other partners who are also carrying out some interventions that have an implication on living income. Like the NGOs and other private companies, who are part of this sustainability commitment, pursuing some interventions that have implication on the living or cocoa farmer. And the cocoa farmer himself. So carrying out activities has implications on his living income. So his actions and inactions has the effect on living income. So this guy decides, so they should be talked to in terms of living income. Probably the financial institutions. But here again, it comes down to policy again. So financial institutions are also one of them and that we need to talk to.

NZ So you say are saying, Cocobod is actually really important in this. So great to talk to you on my topic. How is the relationship between the Cocobod and the smallholder cocoa farmers? Are you in direct contact with them or how does it work?

MA Our strength, how it works, and you discover what it is. In Ghana, there's a law that established kind of cocoa, which we call Cocoa Law. That law and gives us some mandate over the cocoa sector. And this kind of mandate is to encourage persistence and promote cocoa production, marketing and processing. So with that law in view. Cocoa production is done by individual farmers, individually investing according to their business or investing their money or labour to. They decide to acquire land and going into cocoa cultivation. It is your decision. Once you produce the cocoa, the law says the actual farmer takes care of the cocoa. So that is the relationship. So we have the interest that we want to see farmers having a better living conditions, so that they continue to be in the business. So that is the facilitate, encourage and promoting aspect of it. So we've facilitated by giving them some support services to ensure that they are able to do their business well. And to ensure that we also be able to meet the market requirements. So we also put in regulations to make sure that we meet market requirement. So that is the relationship, we give them support. But when it comes to marketing, we by law, are supposed confirm a market for their produce. We don't control information. We don't control their decisions. We influence their decisions with policies. For example, a farmer decides to cut his cocoa and decides to grow rubber. There's nothing we can do. The law doesn't give us any power. But once it produces cocoa, the law says that we have to find a market for the goods. All he does is deliver the cocoa to us and we have to pay an appropriate price. So I don't know how you would describe the relationship. For us that's a supportive kind of relationship.

NZ Okay. And when we're talking about the initiatives, you already touched upon it. What does the Cocobod exactly do to close the living income gap? What are interventions that are out there?

MA I will ask two questions before I answer. First of all, do we have an indication of what is living income in Ghana, because living income differs from country to country. You may have parameters, but it differs...

NZ You mean in terms of the exact number?

MA Yes. Then do we have an idea if we have what we call living income for the cocoa farmers, do we have an idea of the gap?

NZ It's still debated actually, right? There's multiple researches and that don't agree.

MA So you cannot use that to generalise. So what we do as policy makers or as an organisation which targets to facilitate, promote and encourage cocoa production. We know when it comes to the income of the farmer, it is price times quantity plus additional livelihood. True or false? Does it? But the price, we have no control over the price. The price is determined by the international market. Based on that we pay the farmer producer price. In terms of price, we make sure that a list at least 70% of the price the we get from the international market is given to the farmer. That is a policy. In recent times, be more than 70%. In recent times we saw that the price that the international market gave us is not able to for us to pay the farmer in a way that will cover the costs. Ghana and Cote d'Ivoire, turned down and came out to an initiative called Living Income Differential. The Living Income Differential is to bridge that gap between the cost of production of the cocoa farmer and the margins that the other stakeholders – retailers, the brands – are getting on cocoa. So we brought the idea of LID where the off-takers pay 400 dollars, the first buyer pays 400 dollars extra per ton of cocoa. That is also to increase the income of the family. Then when it comes to the quantity, we are supporting the farmers with productivity enhancing programs. Pollination, pruning, high tech fertilizer application, and irrigation. We want to at least improve increasing productivity per hectare from 450 to at least 1000 by 2026/27 season. That is the target. For now, they've been able to move it from 450 to an average of 600 kilos per hectare. We want to achieve 100 kilo per hectare by 2026/27. Then to the farmer business. We are supporting the farmers to take on board additional livelihoods to build on the dependence of the area. We discuss with them, then identify different additional livelihoods that the farmers can engage in. In a nutshell, that is the support. And I forgot to mention that we are also supporting the farmers in terms of extension services. We are giving them extension services, to ensure that they adopt the good practises and get the best out of them. Besides that we have also been watching farmer cooperatives. We are also promoting farmer cooperatives to ensure that collectively they can use their group as a way of sharing best practices, and as a way of learning from each other and to improve on their productivity and practises. The icing on the cake, which is a work in progress. We the cocoa management system, I'm sure you've heard about it. We are collecting, measuring the cocoa farmers taking, numerating them. And besides that, having a payment platform for cocoa transaction. And we believe that once we do this, it is the icing because it opens the door to financial inclusion. Because the cocoa management system gives the farmer a unique ID. Which the financial institution will be requesting in order to lend to farmers. The cocoa management system also gives the financial institutions access to the farm history and the productivity of thee farmer to enable the necessary credit analysis and know how much money to give to farmers. The cocoa Management System payment platform also enable the financial institutions with a platform where they can recover their loans. So we believe when we are done with it, it will open the platform for financial inclusion. So these are some of the intervention we have done to support the income of the cocoa farmer to bridge the living income gap.

NZ So quite some interventions already. And regarding the living income differential, do you see the implications of it? Are they big?

MA Yes, it is because the living income differential, that we're able to increase the producer price by 28%. The mechanism that we are using to transfer the living income to the farmers is through the producer price. We don't want to get another block channel increase and create cost. Who pay for the costs? It will reduce the amount of money that goes to the farmers. So our producer price is

determined by sharing the price that we will take for our cocoa. So after we have shared the farmers share. All stakeholders take part in the sharing after we have determined to the farmers, which is at least 70% of the [...]. We slap the LID on it, to arrive at the producer price. So nobody partakes in it. Cocobod does not take parts of it. The full amount is given to the farmers. So that was why the producer price of the farmer was increased by 28%. So the farmers are feeling all of the LID, prices has gone up to 28%.

NZ And do you think that's enough, or is there still more to be done regarding the price of the cocoa?

MA There is still more to be done, in terms of, the terminal price is not good. The terminal price we are observing now. And about ten or 15 years ago, the price that was way better. If you have to bring it into current claims, it would be about 4,000, \$5,000 a ton. But if you now you are getting 2300, \$2400 a ton. Then it's not a good price to ensure a farmer can bridge the living income gap. So that is a big issue in terms of the terminal price. LID is just a top-up. It does improve it, but the terminal price itself is no good.

NZ And how do you say the Cocobod can influence it, or not at all?

MA Unfortunately, the terminal price, we have no influence. Because we have to use this for the raw beans. We have no influence over the market. The market is more determined by non market players. If it were to be determined by demand and supply than we can use our supply management strategies to influence the price. Unfortunately, our influence on the market [...] presents. If the market was determined by non-market implementers. Like speculators, the price of oil, the price of gold, like there is a break between the dollar and the pound, They all determine the price that we get for the cocoa. And now there is even electronic trading. Which is called pepper(?) trading. It has nothing to do with the sold cocoa. It's determining what has happened on the physical market. So we don't have control, I won't say we have control over the terminal price. It is determined by other stakeholders.

NZ Okay. Thank you. And you also mentioned the interventions that are targeting their productivity. And you also said that the productivity has gone up from 400 to 650, I think you said. And do you think you are able to target all the smallholder cocoa farmers with these programmes, or is it that some are getting more and the others are remaining the same?

MA What we did with most of these interventions, to be a demonstration exercise. Each farmer would divide their farm into 4. And we would do one half for you. That is when it comes to pollination and pruning. For mass spraying against diseases, we do it for all farmers. Rehabilitation, we also do rehabilitation. We are concentrating on disease farms. The disease is in the western part of the country, western south. So these are the areas we are concentrated in treating. Because the only way you can treat it is to cut the plant. The farmer can't cut it, it doesn't have the financial resources to cut a rip apart. So we are doing that on behalf of the farmer and take over from the farmer. So some interventions are restricted too. Because with this one we want tackle the disease. We are limiting it to where it is and then pick those farmers. The fertiliser is given to all farmers. But the pruning is done for an acre of a lot. Last year we did help with pruning for all farmers. But pollination we do just half a quarter of your farm. So there you see yourself how it works. Then you can also replicate it yourself. We train the farmer, to be able to do that on behalf of the farmer. Indeed, for pollination, you need to have the eye. Not all farmers can do this, most farmers are aged. So there are young people we have

trained, who can do it for a fee. But the mostly for the farmer to see, so that they get interested to do it.

NZ That sounds really great, that you target all the farmers with it. And do you think they all benefit the same from these programmes?

MA Yes. And you see some of these interventions, the farmer also needs to complement it. For instance, we do your farms and we do these interventions. You don't get the full impact of the interventions. So depending on how cooperative the farmer is or how supportive or complimentary the farmer is, they get a full benefit of the intervention. I forgot to also tell you that irrigation too, is not done for all. Irrigation we are doing some pilots issues. So only some farmers benefited from irrigation, and with that one willingness is important, because it's not going to be free. We have to recover the cost.

NZ And what challenges are out there regarding these programmes to target the productivity of the farmers?

MA I think the most important challenge is funding. And because it involves a lot of investment. Cocobod took a loan, \$600 million loan from AfDB to support. With a distance for seven years. After seven years, there will not be funding. We have to believe the farmers are fit to be lent enough and they should be able to carry. So the major (challenge) is to do with funding. With funding we can cover a lot. The other issue had to do with farmer cooperation, especially when it comes to the rehabilitation. Because when the farmer has a disease, they can get about 250 kilos per hectare. And the farmer, they will be resistant and not prepared to allow you to cut the trees. That's one thing we have to work on, on the farmers; sensitise and talk to them for them to see the benefits, for them to see and to take it on board. The other thing we are looking at is adoption rates. We are yet to weigh them off. They are hoping they have weight them off, they would have learnt a lot and to take up the technology themselves. And doing it by themselves. Because it is going to give them some benefits and improve their living income.

NZ And do you see that there's a lot of uptake from these practices? Because you also said you are doing trainings regarding best agricultural practises, right?

MA Yes. That's the extension service that we do. So we give them that training. We have a extension agents all over the cocoa regions. They have interactions with the farmers, they have 1 to 1 interaction with the farmers. And sometimes they [..], farmer rallies that they do. And though these sensitisation programmes we do a lot. Information centre, communication.... So they're also doing a lot to support the families to improve on that, to put that activity.

NZ You said the willingness of the farmer to participate is a bit of a challenge. How are you trying to deal with this?

MA So what we did was to come out with compensation based strategy. Where the farmer is giving some compensation for loss of income during that time when we are cutting it, the income he's not getting the first year. The second year at least to get something from planting, which the revenue from planting will be more than. Even the revenue from planting would me more than that you were getting on the disease farm. Then in the third year, we hand over the farm to you. Then you start making it economic. In fact, by the third year the cocoa has such a feature you start getting some things in

addition to the plantings that you have. So that's how we were able to overcome that challenge. And a lot of sensitisation, we do that a lot to convince the farmers. Regarding the diseases, if we don't do it and block. Do a few farms. So you should convince the farmers before you start. I know that with at least some farmers, you earn respect. There'll be reinfection.

NZ And are there any opportunities still out there regarding increasing the productivity of the farmers?

MA Yes. As I said, the target is to get at least a thousand kilos per hectare. So there is vast room for improvement. There is vast room in terms of farming practises that farmers are engaging. There's a lot more that we can do in terms of the technology adoption, in terms of complementary services. When it comes to mass spraying, we do three rounds. [...] will tell you to do six rounds. So therefore, the farmer is supposed to complement with three more rounds. If they don't do that, you don't get a full benefit. So do we solve this, so the farmers will do the additional ones they are supposed to do? So there is vast room for improvement. We are still not there yet. Because if you go to Indonesia, Indonesia is doing about thousand something kilos per hectare. You go to Ecuador, they are over 2000 kilos per hectare. It can be done here. It is achievable.

NZ So still a lot of work that still needs to be done. Are you optimistic about this? Do you think the targets are reachable?

MA Yes. I believe, as I said, when there's financial inclusion, farmers will get access to credit. And invest in their farms, to be attracted to input credit schemes. So that the input suppliers will have some credit arrangements. Because the input supply are now assured that there is a payment platform where they can take the money from the farmers, recover from the source. So they will be encouraged to set up input investments schemes. I just hope we have that space for them to get investments to invest in their farms.

NZ Is that also something you are working on to increase the access to finance for the farmers? Or is that something out of the scope?

MA We are creating the platform. Once we create the platform. We have had several engagements with the financial institutions. You know, I as a worker, I go to your bank you decide to loan to me because I have [...], I have a payslip. You are to look at my payslip and do some credit assessment. It doesn't exist yet. But with a cocoa management system, a farmer will have an address. The farmer will have a payslip. So it opens up this place. So we have the risk now, we are dealing with the risk of agriculture, the risk of cocoa farming. And enable farmers to have access to credit. So we are facilitating the process. We have tried on our own to give inputs to farmers on credit, they didn't pay. So we don't want to do that again. We want to use the platform to raise the funding and allow the financial sector to promote their business to them. Then they will go for their facilities.

NZ And I know that there are also a lot of other organisations working on access to finance programmes like the VSLAs and stuff like that. How is your relationship with these organisations?

MA Yes, these are mostly done by NGOs and the private companies. We see them as complementary services. And we see them as pilot programmes which, once they are successful, we will promote it amongst. We believe when people come on board, we use them to promote some of these schemes for others to scale them up. We see this as a pilot programme scheme because they do not cover much,

not a lot of them. Just about to 1% of the farmers. We will use the lessons learnt to promote that aspect.

NZ Are you also directly working with them or more from a distance looking what they are doing?

MA Well, we are working with them. Most of them work through our LBCs. The LBCs report to us, the initiative that they are taking. And we also do attend their meetings. Sometimes we also call them for meetings. And to our [...] we also come across all this interventions. Some of them we are even on the implementation committees, influencing some of the things that they are doing. So we are well aware of their interventions and they have our support. We see them as complementary.

NZ And so there are a lot of stakeholders that are dealing with the cocoa industry in Ghana. How do you see the coordination is going between all these different stakeholders?

MA Cocoa is an interesting sector. Most of the stakeholders either come through Cocobod or the LBCs. So all of them, to some extent, are connected to us. Through our regulation framework and our engagement platform and principles. For instance, when you talk about cocoa, we are in close collaboration with the Forestry Commission. We have a joint programme going, we are learning from each other and we would scale up on the results of these programmes that we are doing. So we are closely in touch with most of the programmes that are being implemented by the private sector.

NZ Do you have any other comments regarding the productivity programmes? What is going well or what can be improved?

MA Well, there's still room for improvement. Say, you do programmes, you learn lessons and you see back the lessons into the policy to fine tune it, to make it better. And to also be interested to look at, and to learn some lessons from what the private sector is doing. What did they do, being good, that we can also take on board. What are some of the best practises when it comes to all of these support schemes in other countries? Can we learn some lessons which can be helpful to us, in terms of improving the interventions that we implement all throughout the country.

NZ And before, you said you are looking at the NGOs and private interventions and you see them a bit as pilots. Do you think it is easy to scale up these kind of things once they seem to be successful on a small scale?

MA Once they are successful, it is easy to scale it up. Some of them will call for just promoting it, amongst farmers. Mainstream them into our extension programme to them. Some of them is just, mainstreaming them. Essentially getting to know, get to know what does worked and what does not worked. And tell the farmers what to do. So we don't take it to be much of a difficulty.

NZ And then that also comes together with the farmers willingness to participate. So if that goes well from both sides, I can imagine, that would be an ideal situation.

MA Exactly yes.

NZ And in the beginning, you also mentioned some interventions regarding income diversification. What are you doing exactly regarding that?

MA So we don't call it income diversification. Well, income diversification, additional income. But not crop diversification. So we introduce them to additional livelihoods that especially during the lean

season they can depend on. So that they do have some kind of expenditure stability. They need to have some consistent income. Because during the lean season, they don't get margins on cocoa. But you need to live. They need a living income, so that can complement it. So what we do is that to the farmer business school. We introduce them to a number of additional livelihood programmes within the area. We did that last year for different jurisdictions. And this year what we look at is, which of them is sustainable, which are the ones that have a market within the local economies. And you do not want to introduce them into a new venture where they go into it and there is no market, it cannot be sustained. So we have to introduce them to it, from community to community. Because each community has [...]. And I would thrive within the area. We've done that, quite a number of farmers are benefiting from it. And we have the private sector also supporting. Also doing a lot

NZ And you said not crop diversification, would that then mean off-farm income? Really besides the farm or still on the farm?

MA Yes. In addition to the farm. These are things you can be doing that's obviously additional income. So it's income diversification, but it's not crop diversification. We don't want them to move from cocoa. Unless the cocoa the farmer is farming is in a forest, that is when we do want to move the farm to another area. But we want to still have our cocoa and still have our chocolate to eat. But we are complementing their income.

NZ I believe there are some programmes in Ghana, from I'm not sure who exactly, that are focussing on maybe crop diversification or not?

MA Farmers are rational beings. If you are going to diversify the crop, he must move into a crop that would give him a better income than cocoa. So which of them? In recent times, we have rubber in the Western region taking over cocoa farms. But it offers them a better income stream. So they have lost quite a number of land area in the Western region. [...] You cannot just go and promote your crop in programmes, when it is not giving enough revenue compared to cocoa. Forget it. You make all the noise, but it won't get anywhere. So that's what we don't normally want to do, crop diversification. We want it to be denationalisation(?), where you take this national course. If it is not sure the farmer sees that this other crop that is making more income than what is doing. He will move, we can't force him. We can either say they acquired the land and decide to go into cocoa farming. [...] Our mandate is to encourage the farmer to make cocoa farming creative. So the farmer will continue to produce. But we can't force the farmer to do it, to continue to produce.

NZ And what challenges do you encounter in moving these farmers to also diversify their income off-farm?

MA Well, as I said, we introduced the additions. We help them in identifying the additional income, where they can add some additional income from. Then some of them we are able to support. Some of them we look for partners, like the private companies, NGOs, who also have some mandate and support to move to some of these additional activities.

NZ And are there still any opportunities out there regarding this income diversification for the Cocobod?

MA Yes. As I said, we are not able to cover all farmers. There are a lot of farmers who need it. Because of the resources, we are able to cover all of them soon. And this is a vast opportunity. So other farmers also benefit from some of these interventions.

NZ And so you have all the programmes that are already out there. Are there any specific focuses from the Cocobod for the future regarding the living income of cocoa farmers?

MA Yes, as I said, we want to achieve a target of 2000 kg per hectare. So that is our focus.

NZ That's the main focus?

MA We implement this in any intervention that will lead to the improvement of the productivity of the farmer. We are getting to it. So we have a strategy document called the Cocoa Sector Performance Strategy. One of the key pillars is productivity. In fact, our argument is based on the three pillars of sustainability. And we have reasoned that productivity is needed to achieve the economic. We believe when a farmer is able to reach a 100 kilo per hector, he would be able to any living income. So that is the target. And that is what we are working towards. And we hope that by 2026/7 at least, we'll get there. Then from there onwards, we set another target. But for now up to 2027, that is what we are looking at.

NZ It's a great target, it would be really great if you could achieve it. And then maybe moving on to a bit of a different topic. Before you also said you are working with the cooperatives a lot. What are you doing regarding the cooperatives?

MA You know, when you look at the principle of cooperatives. One major source where it comes from is selfselect, they are selfselect. So all we do is to promote, so that the farmers know the importance of cooperatives. And if you want to form cooperative processes that you put in, that ends our story. We also promote interventions to motivate them to go into cooperatives. For instance, for most of the interventions if you are in a cooperative, we consider you first. So to motivate more of them to form cooperatives. And there are. So we are supporting them. In terms of the governance, leadership skills and all those things, management system, NGOs with money and mandate will do that. But ours is to promote it.

NZ Are there still a lot of farmers not part of a cooperative?

MA Yes. Cooperatives are quite a new thing in Ghana. It is was not done on a large scale until recently when we decided to promote it. Now we have quite a number on board. I would say most of them are not mature to a level where we have to pass on the basic rules of cooperative. It's still a work in progress. It's a new trend that is catching up. With Ghana compared to Cote D'Ivoire. Normally we give to individual farmers. It is not that we are doing interventions that are forming cooperatives and developing and forming farming association. [..]

NZ And what are the challenges regarding getting these farmers into cooperatives, motivating them to do that?

MA For me, a bigger challenge may be in mission mobilisation. You need to mobilise the farmers. And the mobilising is, somebody must take the initiative. And a person must have resources to do that as one person. And the second, then... You know, cooperatives form when their internal [..], to be able to unite all of them to sustain the activities. And it's another major issue. And that farmers are not used

to contributing. Our farmers have been pompous, so they are not used to contributing. Some of them formed a cooperative. But they collapse along the way because of some of these issues. But the most important is the mobilisation. Who initiates the mobilisation. Where do they get resources to initiate it? The other issue, challenge I see with them is the governance structure. The governance structure with most of them are not well established. So they need a lot of support in terms of capacity building to be able to build effective governance structures. So this some of the challenges that I can identify.

NZ And in general, do you think the farmers do trust the government slash Cocobod?

MA Oh yes, they do trust us. The way the relationship is, is the law. When a farmer produces, the Cocobod needs to pay. So that Relationship is there, that bonding is there. But if you come to a cocoa farmer, you have to come to the Cocobod. It may be difficult to have access to the farmer. They know that we are there for their interests. And we are there to fight for their interests. So that trust, we have it.

NZ Really great to hear. I think I already asked a lot of my questions. Is there anything you think you didn't mention that might be important for me?

MA No. I think you have taken it all from me. All the stuff I have, you have taken it.

NZ It's a lot of information. I'm just thinking for a bit if I have missed something... What are the external factors that are influencing you and the cocoa production?

MA There's enough factors. One is the terminal price. If the price is determined by demand and supply. Why is it that we are anticipating a shortage and that prices are still coming down? But what is holding the price from going up? Indeed, the market is not only determined by demand and supply. It tells you non-market fundamentals, have influence on the coca price. And that's the big issue. How do we ensure that a farmer gets a greater share of the cake from cocoa? How can you do that? We have to explore the various means. We brought the LID. But the LID is not enough. When prices are going down, companies are pushing huge, huge profits. Profits are increasing. Oil prices are coming down. How do you make sure that farmers also benefit from this huge profit. Then the other challenge is the recent regulations that are coming up, EU regulations on deforestation and one on child labour and forced labour are also coming very soon. This all brings additional barriers for the farmer. And the farmer must invest to ensure they meet these requirements, who pays for their cost? Is a market prepared to pay for these costs? Then we have ensure to put in structures to meet these requirement. It is another market or entry barrier. For me this is a major issue.

NZ How would you see those EU laws to be better?

MA I would say: dialogue and dialogue and dialogue and dialogue and dialogue. Because the whole rationale behind this regulation it to ensure that you don't have negative footprints in origin countries. They are now contributing to deforestation through their consumption activities. So we got to sit down and see the best approach. You know, there's an impact assessment or analysis, stakeholder engagement. There wasn't enough engagement in terms of the regulators, they didn't get engaged enough. Recently they have been engaging us in the cocoa talks. So we need to talk and make sure that it doesn't become a barrier. So that it becomes an instrument for change. An instrument that will enable the main actors, who are the farmers, to change and ensure there is no deforestation, child labour and forced labour.

NZ So it can be an opportunity, if implemented correctly. Is the Cocobod part of this conversation, of this law or not at all?

MA As I said, initially when it was being drafted, we were not engaged. After the draft came out, we started engagement. So we are still engaged in their issues or definitions, which we need to work on. Everything in the implementation modalities, we are in touch with them, the European Commission. And for the U.S. boarder control, it has been passed. There was no engagement. It has been passed. And we are forced to meet it. There was no engagement. For the EU one there was engagement. So we are on it.