

FINAL REPORT

Follow up Study – Assessing the Impact of Fairtrade on Poverty Reduction through Rural Development

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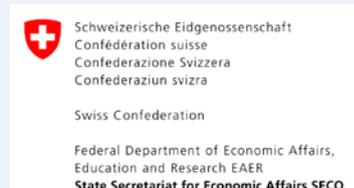
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List of Abbreviations

AGM	Annual General Meeting
BT	Bacillus thuringiensis (bacterium in genetically modified crop)
CDF	Constituency Development Fund (Kenya)
CEval	Center for Evaluation
CI	Community Interview
CLAC	Coordinadora Latinoamericana y del Caribe de Comercio Justo
CO	Comparison Organization
COCOBOD	Ghana Cocoa Board
COSA	Committee for Sustainability Assessment
CP	Contract Production
CSR	Corporate Social Responsibility
FGDs	Focus Group Discussions
FI	Fairtrade International
FLO	Fairtrade Labelling Organization
FOB	Free-on-Board
FPC	Fairtrade Premium Committee
FT	Fairtrade
FTA	Fairtrade Africa
GJM	Gorkha Janmukti Morcha (unregistered political party in India)
GM	Genetically Modified
HL	Hired Labor
ITC	International Trade Centre
JSY	Janani Suraksha Yojana (safe motherhood intervention - Indian government)
KII	Key Informant Interviews
LBC	Licensed Buying Company
LPG	Liquified Petroleum Gas

MPS	Milieu Project Sierteelt (a Dutch certification system)
MT	Metric Tons
NAPP	Network of Asia and Pacific Producers
NGO	Non-Governmental Organization
NFO	National Fairtrade Organization
NOC	No Objection Certificate (India)
NRHM	National Rural Health Mission (India)
PB	Promoting Body
PEB	Producer Executive Body
PEMA	PO#5 Fairtrade Body
PO	Producer Organization (generic term for CP, HL and SPO)
PPE	Personal Protective Equipment
PPP	Public Private Partnership
PPRC	Producer Price Review Committee
RA	Rainforest Alliance
SAC	Sociedad Anónima Cerrada (Peruvian type of limited liability company)
SECO	State Secretary of Economic Affairs, Switzerland
SPO	Small Producer Organization
CPO	Contract Producer Organization
ToC	Theory of Change
TransFair e.V.	Officially registered name of Fairtrade Germany
WR	Worker Representation
VSS	Voluntary Sustainability Scheme

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Executive Summary

For the second time, Fairtrade Germany and the Max Havelaar Switzerland Foundation, now jointly with Fairtrade Austria and the Swiss State Secretary of Economic Affairs (SECO), commissioned the Center for Evaluation (CEval) to conduct a study aiming at identifying the contribution of Fairtrade (FT) on poverty reduction through rural development. The study at hand is a follow-up impact research to the study published in 2012¹, assessing longitudinally the changes that occurred towards the findings back then. It includes the same products (i.e. banana, cocoa, coffee, cotton, flower and tea), producer types (i.e. Small Producer Organizations (SPO), Hired Labor (HL) and Contract Production (CP)), and countries (i.e. Peru, Ghana, Kenya and India) as the 2011/12 study.

In the study at-hand, a theory-based contribution analysis was applied, considering FT's Theory of Change (ToC) and the research areas of the COSA indicators. Following a case study approach, the findings are mainly based on primary qualitative data collected via Focus Group Discussions (FGDs), Key Informant Interviews (KIs) and participatory observations. A quantitative seed assessment activity among farmers and workers to assess perception changes over the last five years complemented the field research. Data collection across the six different contexts took place between October 2017 and January 2018. Findings are structured along the economic, social and ecological dimensions of the COSA indicators and include cross-sectional (FT and non-FT case study comparison) and longitudinal (comparison over time) results. The following findings can be reported on each specific case:

Banana/ Peru

In the economic dimension, FT continues to contribute to a great extent to the strengthening of SPOs in the *Chira Valley*, as, thanks to the premium, infrastructure investments, which improve productivity, leverage economies of scale and improve efficiency in processing, are made collectively – something single farmers by themselves could hardly acquire. Income stability for most FT farmers has further improved. This in turn has enabled FT members to invest in the education of their children, their housing and mobility and has not only brought changes to their households but to the entire reputation of the village. Strong FT cooperatives are capable of supporting their producers in emergency situations (e.g. caused by the El Niño phenomenon), whereas non-FT cooperatives stated to not have the means to provide similar support. Nevertheless, rising competition through large-scale plantations were acknowledged by both FT and non-FT cooperatives as major threat, which could jeopardize small scale *bananeros* of the valley in the future. Indeed, while the 2011/12 study came to the conclusion that FT acts as role model for commercial players in the region, this could not be confirmed in the study at hand. In the social dimension, it could be identified that some banana cooperatives have turned into important actors in local development. While misunderstandings between FT SPOs and local education and health institutes appeared in the predecessor study, today smooth and fruitful relations between the SPOs and community were found. Furthermore, attempts to design more impactful projects could be identified in two FT SPOs.

¹ See: https://www.fairtrade-deutschland.de/fileadmin/DE/mediathek/pdf/fairtrade_impact_study_ergebnisse_wirkungsstudie_de.pdf

While in the 2011/12 study, high occurrence of *machismo* was revealed, the situation has partially improved in the last five years: Women appear to show enhanced participation and self-esteem and also claim to have equal say in their households. Despite economic improvements, some FT farmers, however, have perceived a decrease in social satisfaction. One reason mentioned was that due to improved education and job opportunities, many children move away from their villages which leads to the separation of families.

In the ecological dimension, the study revealed that climate change already impacts on the resilience of producers and will do even more so in the future. Water shortage still remains one of the most pressing problems for the farmers and the adjacent communities, as the nearby water reservoir is about to be exhausted.

Cocoa / Ghana

Looking at economic indicators, FT cocoa farmers generally reported higher incomes than their non-FT counterparts, which stands in close relation to productivity enhancement and reduced costs for farm inputs, as these are partially provided by the cooperative. Indeed, in the 2011/12 study it was observed that the traditionally low productivity in the Ghanaian cocoa sector had improved – a development that was again stressed for FT cocoa farmers in this follow-up study. In contrast, the issue of limited access to loans for cocoa farmers unfortunately remains unresolved with potential negative implications for sustainable cocoa farming in general.

When looking at social indicators, the existence of child labor was identified as a problem five years back, but in the current study no cases were identified or discussed as on-going practice in the FGDs. While children's engagement in farm work within the legally permitted boundaries is quite common, awareness on the issue of illegal child labor and its importance has definitely increased among FT farmers due to systematic sensitization measures. Consequently, however, the possibility of cautious response behavior has to be acknowledged. In terms of participation, it was found that thanks to intensive trainings, five years later, farmers show better understanding on FT processes. Likewise, participation continues to be strong thanks to a well-functioning system of extension officers and FT farmers continue to enjoy regular and systematic trainings.

One focus of capacity building is the implementation of environmental awareness raising measures on sustainable agricultural practices, which have been continued and were progressively extended by the FT cooperative over the last years. They continue to be one of the most valued benefits received from being a cooperative member. Lastly, FT cocoa farmers continue adopting environmentally friendly farming techniques such as composting and planting of shade trees.

Coffee / Peru

Coffee farmers in the Peruvian *Chanchamayo* province have experienced a range of setbacks in the last five years. The most prevalent crisis they encountered was the emergence of *La Roya* – coffee rust – a fungus, whose epidemic spread is widely perceived as a climate change effect, and that has aggressively destroyed coffee plants, led to a dramatic loss of plants and parcels across the Amazonian region. At the same time, the price for coffee in the world market dropped drastically and internal issues of the FT cooperative led to bad managerial practice and distrust among producers. A contract taken up could not be fulfilled due to lower production volumes during *La Roya* and resulted

in a penalty payment, which represents a heavy economic burden for the FT cooperative until today. Negative consequences caused by climate change were not shared equally among supply chain actors but solely borne by the cooperative. 50% of FT premium is currently used to pay back debt. Furthermore, the occurrence of ‘ghost-cooperatives’, set up by local companies who list members that do not actually exist, while instead sourcing from the street, represent further illegal competition for the FT cooperative. The current price received by FT farmers of the target cooperative for one kg of parchment coffee of sufficient quality is only half the price of what it was in 2011. Non-FT farmers experienced the same shock in prices and have been exposed to even greater exploitation when selling in the street. They reported robberies of coffee, fraud in weighing, and random price fluctuations. A large share of non-FT farmers had left their homes and coffee production due to the bad income situation and took on low income jobs in more urbanized regions. Both FT and non-FT farmers had to take up credits by the Peruvian governmental bank and are in debt today with pay back starting from this year’s harvest on. Awareness on the diversification of income sources for both FT and non-FT farmers has increased during the crisis but is still too low to enable living income for farmers in the region.

Social satisfaction is strongly correlated with the economic situation, and social indicators showed that, compared to five years back, farmers appear to have experienced a fall in self-confidence and pride and have lost trust in the promise of coffee. Feelings of helplessness, fear and despair were prevalent among all coffee producers. CODEFAM, the women’s committee that was well functioning during the last study, is no longer active, resulting in a lack of women-directed trainings in the FT cooperative. Nevertheless, despite their precarious situation, the FT cooperative continues its operations and has been able to set-up a Public Private Partnership (PPP) to implement a holistic vocational training course, which goes far beyond the support they provided in 2011.

In the environmental dimension, the 2011/12 study concluded increased awareness regarding environmental practices (e.g. composting), mainly due to trainings under UTZ and Rainforest Alliance (RA) certification. This trend continues as FT farmers stick to environmental policies established by the cooperative. In contrast, non-FT farmer stated to have resumed damaging practices such as burning of fields. Lastly, in the current study, all farmers complained about changing weather patterns, leading to heavier rain and stronger sunlight. Weather related issues caused by climate change were less prominently mentioned during the last study.

Cotton / India

Looking at economic research areas, it could be shown that income for the FT organic cotton farmers was reported to be higher than for the non-FT, BT cotton farmers, both in 2011/12 and in the follow-up study. However, while FT group in the 2011/12 study was characterized by higher productivity, this was not echoed in the follow-up study. Income differences were rather driven by higher crop purchase price and lower production costs through the provision of farm inputs (e.g. provision of seeds, picking up crop at the farm) with the help of the CPO scheme.

In the social dimension it was identified that, unlike in the last study, awareness on the issue of child labor and the importance of education has risen among FT farmers, while this does not seem to be the case for non-FT cotton farmers who allegedly admitted that children are helping out on the field. Gender bias, being deeply rooted in regional traditions and practices, is still an issue, but, at least, girls’ scholarships, provided by the FT premium, aim at increasing the number of female students

pursuing higher education. While access to public primary education up to 8th grade is given, the quality of education raises cause for concerns. Consequently, youth in the region still suffer from low education levels, lack of opportunities to pursue a career that matches their interest and skills beyond farming.

In terms of environmental changes, water scarcity clearly remains one of the most pressing problems for both FT and non-FT cotton farmers. Acknowledging this need, a drip irrigation project is on the verge of entry. Awareness about the benefits of environmentally friendly farming practices for the whole community continues to be much higher among organic FT cotton farmers.

Flowers / Kenya

In terms of economic power, similar to the 2011/12 study, workers of visited flower farms complained about disproportionately high living costs, which were not reflected sufficiently in their wage increases. While there have been improvements in wages in the last six years, in line with Fairtrade's respective HL standard, they do not yet resemble the suggested Global Living Wage for the Kenyan horticulture sector. Political instability and gentrification have recently exacerbated this perception. On a different note, the very high appreciation and importance of the FT farm's savings and credit scheme was again confirmed.

In the social dimension, both, five years ago and today, the FT flower farm in Kenya provides educational support financed by the FT premium and has enhanced their scope of education activities aiming at benefitting the whole community. The non-FT farm examined also invested in single education initiatives, but these were solely directed at their workers and did not show larger impact at community level.

Environmentally friendly agricultural practices such as prohibition of waste burning, use of micro-organisms for soil protection, compliance with criteria for occupational health and safety (regarding use of pesticides) and composting of green waste are still in place and implemented. Furthermore, the FT farm has stepped up and continued its efforts regarding water management and preventing pollution of water bodies. Regular FT audits continue to assist adherence to existing national regulations.

Tea / India

In the tea case, no suitable comparison group could be identified and thus only a longitudinal comparison over time of one FT tea garden was conducted. In respect to economic indicators, the study must acknowledge that tea pickers are still paid below the agricultural minimum wage as was the case at the time of the 2011/12 study. Trade unions have been pursuing a minimum wage for the Indian tea sector, but the Government of West Bengal does not seem to act in this regard. Despite a low share of tea that is actually sold under FT terms and thus limited financial additions provided by the FT, in-kind transfers and infrastructure developments financed by the premium were and are still valued as alternative means for (individual) economic improvement. In the social dimension, women-specific issues that were already identified in the previous study have not yet been solved and the women's committee appears to be inactive. Apparently, scholarships continue to be provided, but FT FGD participants could not confirm the same. Positive changes regarding the environmental dimension, such as increase in biodiversity, were primarily attributed to the fulfilment of

requirements under the organic certification – an observation that can be concluded also in this follow-up study.

Aggregating findings of all case studies, the following recommendations, directed to different actors, could thus be drawn accordingly:

Directed to Fairtrade International / Fairtrade Germany

R1: Raise investments for climate change adaptation. This study found thorough evidence that climate change is already impacting marginalized producers. Actors along the supply-chain should expand their responsibility and support cooperatives and producers at the end of the resource chain in implementing climate change adaptation measures.

R2: Facilitate (supply chain) stakeholder support in times of crisis. The study revealed that externalities can trigger a profound crisis for producers/ workers. Fairtrade should continue to mobilize and sensitize their vast network of supporters to join their efforts in providing emergency support and ensure efficient and timely mechanisms to implement the same.

R3: Improve resilience of small-scale farmers and workers. It is important to enhance long-term resilience of producers and workers. Serious efforts should go into finding solutions for affordable, effective and sustainable agricultural insurance and pension systems, which further enhance farmers' trust, willingness and self-esteem to engage in agricultural activities.

R4: Examine sustainability of capacity building measures financed by the premium. Long-term benefits of premium investments implemented by some POs raised doubts and might often only yield rather individual benefits than institutional learning. It is recommended that POs are better guided in usage of the premium to jointly identify the best cost-benefit measures as per specific context.

R5: Investigate the occurrence of so-called 'ghost-cooperatives'. The emergence of 'ghost-cooperatives' is of high cause for concern since the FT system appears to be misused by local private companies. The issue must be examined in more depth by integrating the observations by local FT organizations and solutions to prevent the same in the future must be articulated promptly.

R6: Continue to work on strategies to increase sales under FT. This study found that low shares of FT in respect to total sales are still a crucial limiting factor for larger impacts. Achieving an increased market penetration should continue to be a top priority. In specific, the tea case represents major challenges due to its political context and, generally, low tea consumption in countries like Germany.

Directed to FT regional networks (Fairtrade Africa, NAPP, CLAC)

R7: Improve capacities in social program design. The research revealed that some FT POs are now mature enough to not only handle well the premium but also to constitute an important player in rural community development, partnering e.g. with municipalities. To do so, better capacities in results-based social program design are required to move beyond mere infrastructure projects or one-time trainings.

R8: Create a space for knowledge sharing among FT POs. Several POs mentioned that there is a need of learning and knowledge exchange. Best practices on FT premium investment should be shared more frequently, and both online and offline settings could be created to facilitate these processes. Actors must not necessarily be brought together on a national or supranational level but could for instance also entail having monthly meetings between POs in the same product category and region or annual competitions.

Directed to SPO /CPOs

R9: Improve scale-up strategies of cooperatives. Distance is a crucial factor in price determination as well in retrieving benefits from the FT SPO. Different pathways of scaling are followed across the case studies and it is recommended to examine scaling strategies in more detail to identify the ones that yield benefits for all farmers, including the ones who are settled in remote areas.

R10: Promote income diversification. Diversification is to some extent difficult for SPO management, as they sometimes struggle to assure that members hand in enough produce to fulfill trading contracts. Nevertheless, diversifying income channels is indispensable to ensure stability, an acceptable quality of life level, and in some cases even survival of farmers. POs should promote diversification of their members to ensure that they continue their farming activities even in times of crisis, instead of migrating to cities.

R11: Create attractive opportunities for the next generation of farmers. This study revealed that in most SPO settings, children of current members show disinterest in pursuing agricultural activities of their parents. New opportunities for youth must be identified to improve the image of agricultural practice and find areas of work that match with their interests and talents. It is recommended to conduct more research on aspirations and perception of the younger generation of farmers to adequately cater to their needs in the future.

R 12: Explore opportunities to help farmers invest in the modernization of their farms. The study showed that especially for self-employed smallholder farmers, the acquisition of funds for necessary investments into their farms poses a huge challenge – especially for female farmers. SPOs /CPOs may either assist in the actual acquisition of funds (e.g. by setting up credit schemes) or explore alternative ways that support farmers in the modernization of their farms (e.g. by providing new seedlings or other farm inputs).

Directed to HL POs

R13: Take action on the call for living wages. FT has obliged their POs to move towards *living wages*, at least in terms of income increase above inflation rate. Whereas in the flower case improvements can be slowly recognized, no change in implementing a fair minimum wage has occurred in the tea case. Instead, colonial structures are preserved and an increase in power of tea garden workers is feared by key stakeholders. Hence, FI and its HL POs should examine if and to what extent the current situation on tea farms in West Bengal is still in line with the FT approach and its principles and identify key stakeholders to take actions accordingly.

1. Introduction

Fairtrade (FT) pursues the three long-term goals of making trade fair, empowering small producers and workers and fostering sustainable livelihoods (Fairtrade International, 2016). The efforts of Fairtrade, and in specific of TransFair e.V. are, traditionally, accompanied by extensive research to systematically understand dynamics and processes on how FT contributes to positive change – especially in the Global South. In 2011/12, the Center for Evaluation (CEval) was commissioned by TransFair e.V. and the Swiss Max Havelaar Foundation to carry out a study on "Assessing the Impact of Fairtrade on Poverty Reduction through Rural Development". The study was the first of its kind to analyze the contribution of FT to improved living conditions in rural areas. The study design covered the countries Ghana, India, Kenya and Peru and the product categories banana, cocoa, coffee, cotton, flower, and tea. Specific features of three types of producer organizations, i.e. Small Producer Organizations (SPO), Hired Labor (HL) and Contract Production (CP), were thereby taken into account. As the study generated fruitful insights to how the presence of FT contributed to an improvement of living conditions of its producers and triggered a FT-internal debate on the need for a second business model² to increase FT-sales, in 2017, Fairtrade Germany wanted to build upon these findings and initiated a follow up study³ as one of the activities to highlight the year of its 25th jubilee⁴. Five to six years after the first study, CEval now went back to the same countries, organizational settings and products to collect data from Producer Organizations (POs), their members and communities across three continents.

The study at hand applies a theory-based contribution analysis, basing its findings on majorly qualitative data collected in Focus Group Discussions (FGDs) and Key Informant Interviews (KII). Participatory quantitative seed assessments, observations as well as an in-depth document analysis complemented the data collection. Overall, eight explorative interviews, 70 key informant interviews with representatives at the management level, 57 key informant interviews with community representatives, 19 interviews with workers or farmer representatives, twelve participatory observations and 89 FGDs were conducted across the six different contexts. Findings are structured along the research areas proposed by the Committee on Sustainability Assessment (COSA), covering the economic, social and environmental dimensions.

The study is structured as follows: Chapter 2 elaborates on the study subject, including objectives of the evaluation as well as the theoretical framework, i.e. the Theory of Change (ToC), the study is based on. Chapter 3 describes the evaluation methodology, touching upon the general design and specific methods applied for data collection and analysis. Furthermore, sample and scope of each of the six case studies are described and limitations of the study are outlined. Chapter 4 provides findings on each case in respect to economic, social and ecologic research areas. In addition, cross-sectional findings and longitudinal developments are described for each dimension. Chapter 5 elaborates on conclusions, referring back to FT's ToC and provides recommendations.

² Now operational under Fairtrade Sourced Ingredients; For more information see [here](#).

³ This year's study is jointly commissioned by Fairtrade Germany, FAIRTRADE Austria, Max Havelaar Foundation Switzerland and SECO.

⁴ Although the 2011/12 study was initially not designed as a baseline study to following research, its findings can now be utilized as baseline comparison for the follow-up study.

2. Study Subject

2.1. Objective of the Evaluation

In accordance with the study of 2011/12, the subject of this follow up study is the contribution of FT to rural development. Rural development is thereby understood as sustainable development in the rural sphere within and beyond FT POs. Drawing upon the COSA indicators for sustainability assessment, the social, economic and ecologic dimensions of sustainable development are considered and accordingly operationalized. Which changes in rural development can be observed and to which extent FT certification contributes to these changes poses the central interest of this follow up study. Hence the following hypothesis has been established:

“The Fairtrade-certification has a positive impact not only for the producers but also for the development of their surroundings/geographical environment, i.e. the involvement and participation of residents in rural development activities and the social, economic and environmental conditions in rural areas, typically the home region of members/workers of Fairtrade-PO.”⁵

Fairtrade is not only an alternative approach to conventional trade, it can also be considered a strategy for poverty alleviation and sustainable development through ensuring the payment of at least a minimum product price (based on the methodological approach of the “costs of sustainable production”)⁶ and of a defined additional development premium, democratically organized workplaces, technical assistance, social programming and environmental protection, inter alia. Its purpose is to create opportunities for producers and workers, who have been economically disadvantaged or marginalized by the conventional trading system. One central element of the Fairtrade system are the standards which are set by the Fairtrade Labelling Organization International (FLO)⁷. These standards comprise social, economic and environmental requirements and aim at improving the working and living conditions of farmers and workers in the Global South. SPOs, farms with HL, and in some cases farmers that are not yet in a position to form a fully operational SPO, but have some basic organizational structures in place, can become FT-certified if they adhere to these standards. Once a farm or PO is certified, the goods produced adhering to the standards can be sold under the FT label. For these products at least, a Fairtrade Minimum Price is paid (with some product-specific exceptions). If, however, the relevant market price for a product exceeds the guaranteed minimum price then at least the market price must be paid. In addition, a Fairtrade Premium is paid, which the producers can spend on democratically agreed development projects. Fairtrade also encourages and supports small producers and workers to build strong,

⁵ Exact wording of the hypothesis of the 2011/12 study: “The presence of representative Fairtrade-certified cooperatives or plantations/farms within a given area has a positive impact not only for the producers but also for the development of their surroundings/geographical environment, i.e. the involvement and participation of residents in rural development activities and the social, economic and environmental conditions in rural areas, typically the home region of members/workers of Fairtrade-PO”. As representativity of the chosen FT POs could not be guaranteed and verified on the basis of available qualitative data the hypothesis has been rearticulated.

⁶ This approach ensures as much as possible that „true“ cost for producers are covered, i.e. contributes significantly to avoid cost externalization to the disadvantage of producers. FT is the only VSS with this requirement.

⁷ Today usually referred to as Fairtrade International (FI).

independent organizations like cooperatives, producer-owned enterprises, independent trade union organizations or Fairtrade Premium Committees (FPCs).

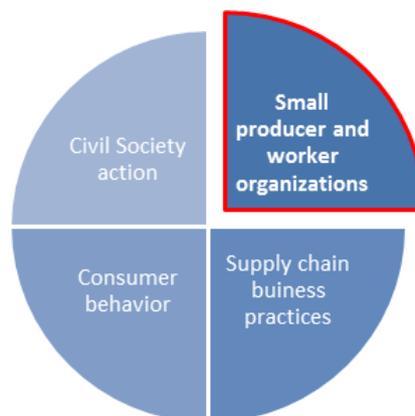
2.2. Theoretical Background

The theoretical foundation for this study and its further methodological operationalization is provided by two central concepts, the first being Fairtrade’s Theory of Change (ToC), the second the Committee on Sustainability Assessment’s (COSA) set of indicators on sustainability in the rural context. In the following paragraph, firstly, the relevant elements of Fairtrade’s ToC for this study shall be outlined, before, secondly, the systematization of the COSA indicators and the corresponding central research areas guiding this study are presented.

A **Theory of Change** logically links interventions and activities to immediate (outputs), intermediate (outcomes) and long-term results (impacts) that can plausibly be expected or aspired. In this sense FT’s ToC of 2015 provides a guiding framework for an assessment of impacts on and beyond FT POs, as it is the theoretical impact model of FT’s work. However, as it had not yet been established at the time of the 2011/12 study, it now has to be integrated with the previous framework, which built upon the three dimensions of sustainable development (economic, social, ecologic) and their operationalization through the COSA indicators.

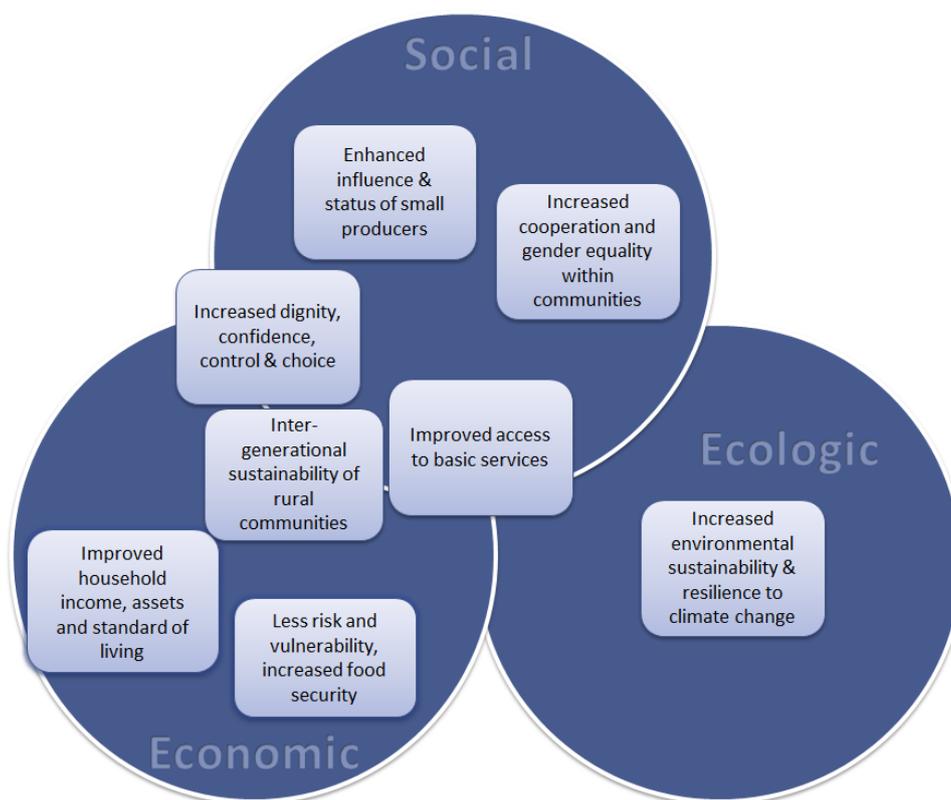
In terms of FT’s intervention, two sets of activities can be grouped: standards and certification on the one hand, and strategies and policies, which enable engagement in FT on the other hand. In addition, the FT ToC differentiates between four spheres of change, in which FT aims to bring about transformations. As this study exclusively focuses on changes on the producer side, it does not consider impacts in the three other spheres of change, which are recognized in FT’s ToC, namely civil society action, consumer behavior, supply chain business practices. Consequently, only impacts in the sphere of change of small producer and worker organizations are considered in this follow-up study, depicted in figure 1.

Figure 1 - Spheres of change in Fairtrade’s ToC



Eight impacts in the sphere of small producer and worker situations are further differentiated in FT's ToC⁸. They touch upon different dimensions of rural development and were hence roughly attributed to one of the three dimensions of sustainable development in the rural zone, as depicted in Figure 2. While for instance FT's impact 'Improved household income, assets and standard of living' is central to an assessment of FT's effects in the economic dimension, the impact 'Increased environmental sustainability and resilience to climate change' can be linked to the environmental dimension.

Figure 2 - Social, economic and ecologic dimensions of sustainable development and impacts of Fairtrade's ToC



In order to allow for research on the achievement of these impacts of FT, the current study draws upon the systematization of the **COSA indicators**. As this set of indicators had already provided a basis for data collection and analysis in the predecessor study of 2011/12, the approach was also beneficial for ensuring continuity between the two studies. Generally, the COSA indicators are organized within the three dimensions of sustainability – the economic, social and ecologic dimension – and they are standardized to ensure comparability over time and across regions or countries while serving as proxies for difficult to measure phenomena, such as poverty reduction through rural development. In COSA's words they were *“designed to quantify and clarify information in a manner that promotes the understanding of key environmental, social, and economic issues”* (Committee on Sustainability Assessment, 2017).

Contextually related indicators have been clustered into core elements or research areas within the respective dimension in order to guide more focused research. Consequently, data collection and analysis of this study were structured along these research areas within the three dimensions of sustainability. This approach is also reflected in the structure of the findings chapter 4. On this basis

⁸ Please refer to Figure 10 and Figure 12 of FT's ToC, which can be found [here](#).

chapter 5.1 will attempt a reflection on FT’s contribution towards the achievement of the aforementioned eight impacts. While the complete set of indicators guiding this study is provided in the annex, the following table presents the 16 research areas under investigation:

Table 1 - Dimensions of Sustainability and Research Areas Guiding the Study

Dimension	Research Area
Economic	Income
	Diversification
	Information
	Credit and Financial Services
	Vulnerability
	Differentiation
	Infrastructure
Social	Working Conditions and Labor Rights
	Education
	Gender
	Health and Safety
	Participation
Ecologic	Resource and Input Management
	Water quality
	Soil conservation
	Biodiversity

3. Evaluation Methodology

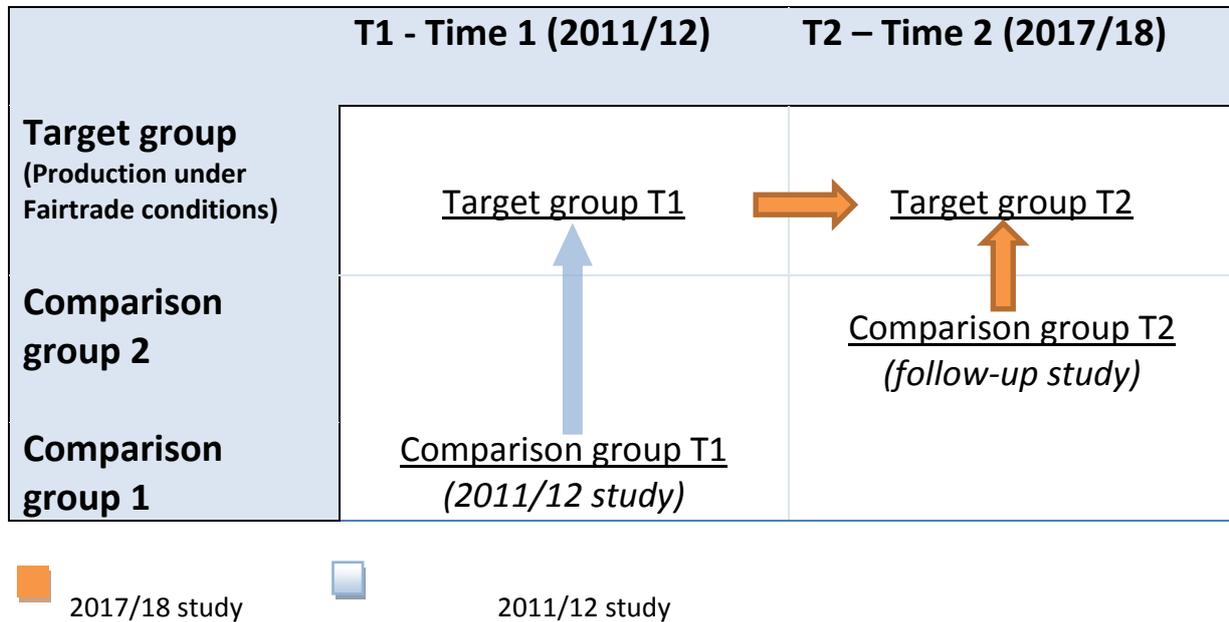
3.1. Study design and evaluation approach

In general, to evaluate the impact of FT on rural development a **contribution analysis** was applied. While in contrast to an attribution analysis, this approach does not provide for a doubtless assignment of observable impacts to a specific intervention, it facilitates plausible conclusions whether and why impacts occurred and the extent to which FT certification contributed to achieving impacts. Therefore, the evaluation is **theory-based**, meaning that assumptions about causal inferences between the measures undertaken in the FT scheme and the observable changes on the producer side are scrutinized and finally validated by empirical data.

To build upon the well-documented qualitative case studies from the 2011/12 study, again a **comparative case study design** according to Gerring (2004) was implemented. It consists of the case studies (i) banana in Peru, (ii) cocoa in Ghana, (iii) coffee in Peru, (iv) cotton in India, (v) flowers in Kenya and (vi). tea in India. While cocoa, banana and coffee represent SPOs, cotton falls under contract production (CP) and tea and flowers represent the HL settings. To assess potential developments for FT certified target groups (i) two different points in time (2011/12 vs. 2017/18) were taken into consideration. In addition, (ii) differences between target groups and comparison

groups were assessed based on data from 2017/18. Figure 3 summarizes the evaluation design as follows.

Figure 3 - Overview of evaluation design



The advantage of this primarily qualitative approach is manifold: (i) It allows a broader holistic view on a wide range of different domains and thus, is highly appropriate to explore the multidimensional development paths FT aims at. (ii) Whereas quantitative approaches are much more standardized and require a deductive research agenda with well-defined hypotheses, qualitative approaches leave greater room for inductive procedures, which contribute to the generation of improved theories when disentangling underlying reasons for observed results. (iii) Moreover, a qualitative case study approach facilitates a more comprehensive view on the phenomenon by better including the perspectives of different stakeholders. In this regard, greater emphasis is placed on the target groups (i.e. communities and households participating in FT) and on in-depth insights on social, economic, and ecological aspects as displayed in figure 3. A potential drawback of this approach, however, lies in the reduced statistical representativeness, which shall be further elaborated on in chapter 3.4 (limitations of the study).

In a first step an **analysis grid** was developed to guide data collection and analysis (see annex 7.1). It allowed for an assessment of the underlying impact hypotheses emanating from the FT Theory of Change. The analysis grid also served as a basis for the development of data collection instruments, data analysis methods, as well as the structuring of the evaluation results.

Based on the analysis grid and the corresponding indicators, impact hypotheses were assessed on the basis of a **mixed-methods** approach. Different data sources were combined with different data collection methods and analysis procedures. Whenever possible, data sources were triangulated to validate findings. Moreover, insights from one data collection instrument were complemented by insights from other instruments. Beyond data triangulation, a mix of qualitative and quantitative data analysis methods was applied to enhance reliability and objectivity of results. To diminish researcher

biases and enhance inter-subjective comparability of results, findings of the evaluation were reviewed by a researcher who had not directly been involved in the data collection process.

Finally, the evaluation followed a **participatory approach** by involving representatives of FT throughout the evaluation process – from framing and operationalizing of the evaluation questions to its results interpretation – and by consulting all relevant stakeholders for insights on the selected case studies. On top of that, participatory activities with beneficiaries during the data collection affirmed the participative character of this study.

To sum up, the research is based on a comparative case study design across four countries (i.e. Ghana, India, Kenya, Peru), three different production settings (i.e. SPO, CPO, HL) and six different crops (i.e. bananas, cocoa, coffee, cotton, flowers, tea).

3.2. Methods of Data Collection and Analysis

The evaluation drew on a number of different data sources. These included secondary data of FT in general and for the selected case studies, as well as the collection of primarily qualitative data. **Secondary data** comprised the FT Theory of Change, the COSA indicators, the 2011/12 study and underlying case study reports, as well as relevant publication and research studies on FT in general and the specific POs visited. Available materials were reviewed to gather further insights on the effectiveness and impact of FT certification, and its potential benefits and challenges, which in turn informed the design of revised data collection instruments.

Primary data collection was based on three complementing pillars: in-depth interviews, participatory observations and **Focus Group Discussions (FGDs)**. In a first step, **explorative interviews** with national and international staff of FT (i.e. supply chain managers for the crops under consideration and regional network coordinators) were conducted. They served primarily the purpose to inform the in-depth case studies. In a second step the case studies in six different crop settings built the core of the data collection. **Key informant interviews (KII)** were conducted at two levels: Firstly, representatives at management level (i.e. presidents of the cooperatives, environmental officers, gender specialists, extension officers, technical directors etc.) were interviewed. Secondly, community representatives (i.e. municipality staff, teachers, doctors, opinion leaders, village chiefs among others) were approached. They fed insights from a wide range of stakeholders in the analysis and allowed an assessment grounded on multiple perspectives. Explorative and key informant interviews followed interview guidelines which were developed according to the analysis grid.

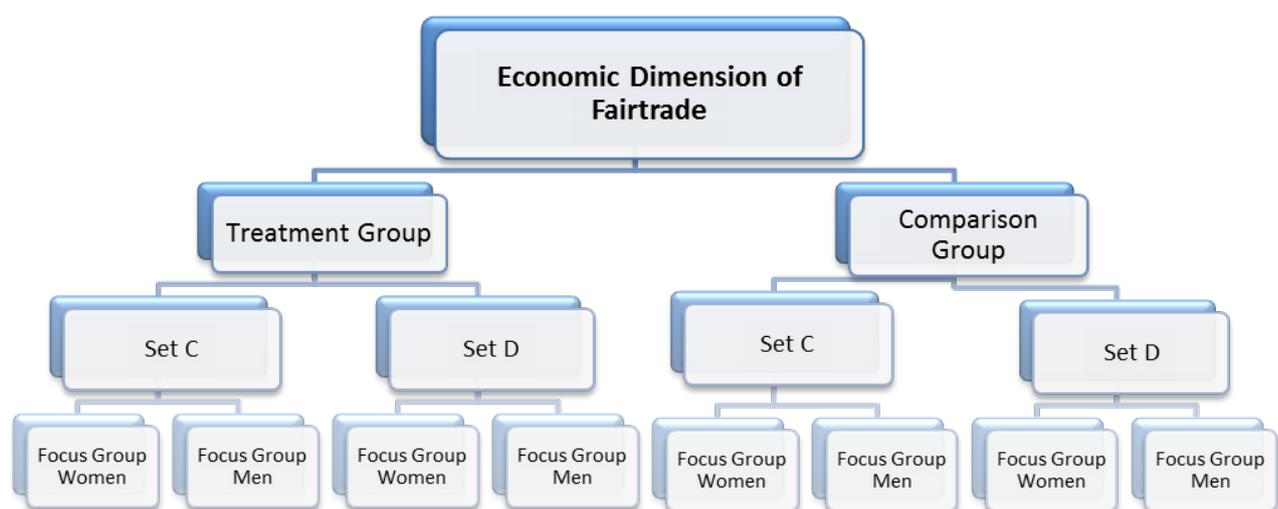
Interviews were complemented by **participatory observation** on site (i.e. at community meetings, coffee processing plants, banana packing stations, among others) which gave the research team the possibility to gain additional impressions regarding developmental stages of respective COSA indicators.

FGDs laid the foundation for the comparison of the target groups over time but also for the differentiation between FT participants and non-FT participants. Hence, they were conducted in FT and non-FT settings whenever possible throughout the six case studies. Hereby, it is important to understand that FGDs when well-designed allow to validate individual opinions by consent among the discussants or disclose extreme positions in case of dissent. Therefore, a safe space for discussants had to be created, by guaranteeing anonymity and forming rather homogenous groups

without stronger hierarchies. This has been taken care for by the research team when conducting discussions without company staff for the vast majority of case studies and discussing separately with male and female participants. Moreover, average group size was held with around 5-6 members rather small to facilitate participation of all discussants.

To further acknowledge the comprehensive research interest and to allow participants sufficient time for in-depth discussion, four different sets of FGD guidelines were developed. As most intended impacts of FT certification are spread among the social and economic dimension of rural development, accordingly two sets of discussion guidelines were developed for these two dimensions reflecting the COSA indicators. Conclusively, 16 FGDs were implemented in each case study, i.e. eight with the treatment group and eight with the comparison group, each comprising four male and four female groups. The environmental dimension was stressed on during KIIs with experts in this regard. Figure 4 illustrates the set-up for the economic dimension.

Figure 4 - Focus Group Discussion Design – Economic Dimension



Beyond this, all FGD guidelines entailed a general assessment of the participants’ perception in regard to the social, economic and ecologic dimension. For this assessment the research team went beyond the typical set-up of FGDs and applied a **quantitative seed assessment**. FGD participants were asked to assess their today’s and past satisfaction towards their social/economic/environmental situation on a scale from 0 to 10 where 0 stands for very low standard and 10 for excellent standard⁹. To simplify the procedure, 10 items of locally available material, such as cocoa beans or sweets, were distributed to each participant. Graphical visualization of the scale and questions as well as testing ensured that participants understood the concept.

Given this standardization a wide range of single aspects could be assessed by a number of FGD participants within a period of time of two hours per FGD. The seed assessments, a participatory evaluation method, moreover facilitated a retrospective comparison to evaluate today's situation

⁹ The detailed questions asked comprised, for instance, “How satisfied are you with your quality of life (social situation) today?” and “How satisfied were you with your quality of life (social situation) five years ago?”. To facilitate the retrospective queries, points of reference were given, such as “... when XY was president” or “just before the event of XY”.

with the state of five years ago. FGDs were conducted in a vibrant way, leading to the disclosure of information beyond the FGD questions. When sharing their individual rating, all discussants equally participated in the assessments sharing their personal story and opinion. Extreme differences in individual ratings, in turn, stimulated in-depth discussions on selected issues.

With regard to the **identification strategy** for interview partners and focus group discussants, explorative interviews were conducted based on direct recommendations of Fairtrade Germany. Key informants were either selected due to their unique position (e.g. as president of a cooperative), on recommendation of earlier interview partners, or on recommendation of discussants. To avoid a fully convenient sample, the research team tried whenever possible to select interview partners based on recommendations of different stakeholders. For the composition of the FGDs, ideally a random selection from memberships lists took place. When this was not possible advice of independent community representatives has been obtained. In cases where this was not feasible, management representatives were asked to provide at least a pre-selection, to enable to compile a final selection of FGD participants.

Overall, eight explorative interviews, 65 key informant interviews with representatives at the management level, 57 key informant interviews with community representatives, 38 interviews with workers or farmers, four participatory observations and 96 FGDs have been conducted. Table 2 shows a disaggregation per case study crop.

The analysis grid structured the data analysis based on the COSA indicators. Qualitative data underwent **qualitative content analysis** while quantitative data was analyzed by applying descriptive **statistics**. In this regard, especially perceived changes over time in the economic, social and environmental dimension were carved out and differences in these developments between FT and non-FT farmers /workers compared. While the same FT POs like in the 2011/12 CEval study were included, it has to be noted that the same comparison groups could not be traced across all case studies. Given the improved data collection instruments comparisons over time have been taken with care and were only then considered as valid when they were in line with retrospective assessments described above. In turn, retrospective assessment is also prone to subjective biases and hence is backed by further qualitative data or results of the 2011/12 study. To further reduce subjectivity biases and overemphasizing on single opinions, qualitative and quantitative analysis always comprise contextualization and triangulation within and among case studies. Although the research design does not provide statistically representative results, the explorative setting allows identifying general patterns and trends of FT certification beyond country, crop and production setting specifics.

Table 2 - Overview of data collection

	Cocoa	Banana	Coffee	Cotton	Tea	Flowers
Explorative expert interviews		2	2		3	1
FGDs	18	16	14 ¹⁰	16	9 ¹¹	16
Management interviews	7	27	14	4	12	6
Worker representation interviews				4	5	10
Community interviews	6	6	6	22	10	7

3.3. Sample and Scope

The following section explores the settings of all six case studies, revealing details of the different phases of data collection. For each case, both the FT and non-FT organizations and villages visited are briefly described.

3.3.1. Banana Case Study

In Peru, 23 SPOs, constituting of 5700 small scale farmers, export bananas under FT certification turning Peru in the country with most SPOs for banana production worldwide (TransFair, 2014). The majority of banana exportation is centered around the *Chira Valley*, located in northern Peru in the state of Piura and close to the urban center of Sullana. Since export of bananas started in 2001, the valley has turned into the Peruvian hub of banana production and experienced a tremendous rise in prices thanks to exporting. Due to so far almost ideal climate conditions, water supply from Andean glaciers and former lack of economic power to purchase pesticides, the banana sector in Peru since long has been characterized by its organic production, which makes the Peruvian banana one of the most expensive worldwide. The area is characterized by micro producers, who possess on average around 0.9 ha of farmland, which they call *chacra*. Following the ‘cluster’ approach of the 2011/12 CEval study, four FT certified cooperatives were examined and their findings aggregated to achieve collective conclusions. An overview of the FT POs visited is given in the following:

PO#1a: The association, located in the village of Querecotillo, was founded in 2001 and was the first one obtaining FT certification in 2002. PO#1A consists of 331 members out of which 16% are female.

PO#1b: The association is the largest exporter of bananas within the valley and is located in the village of Samán. It was founded in 2003 and received FT certification in 2004. PO#1B counts 450 members, out of which 60 are women, and is spread across 600 hectares.

¹⁰ In the coffee case, only 14 FGDs could be achieved due to external factors influencing the research. Firstly, mobilization of farmers was time consuming, as farmers were sought in their homes, which are often located on their plantations itself and not in a centralized village. Secondly, strikes of potato farmers, blocking the roads, forced the research team to leave one day earlier for security reasons.

¹¹ Since no comparison-group could be identified, nine FGDs were conducted with the FT tea garden.

PO#1c: The association was founded in 2002 and received FT certification in 2004. PO#1C now counts 625 members, out of which 30% are female. It was the second largest exporter within the region in 2016 and is based in Querecotillo.

PO#1d: It was founded in 2003 and received FT certification in 2005. Based in the village of Salitral, the association, currently, consists of 746 members and approximately 200 workers. PO#1d has lost its FT certification in September 2017 and was in the process of re-applying at the point of data collection for this study (see section 4.1.1). PO#1d hence shows traits of both comparison and treatment cooperatives, making it a very interesting case.

Due to the fact that there is a high degree of variety within the four clustered cooperatives, the researches opted to examine both collective findings as well as particular results for each cooperative, enabling an additional comparison between the four. The identification of a comparison group within the same area was challenging, since almost all cooperatives in the valley work with FT certification. Nevertheless, with the help of experts and managers of FT cooperatives, who used their private network, cooperatives that served as comparison organizations (CO) were identified:

CO#1a: The organization was founded in 2005 and is based in Querecotillo. After experiencing a decline in the last years, it now comprises 100 members, who possess about 56 hectares. The association has just lost the organic certification as well as GLOBALG.A.P.¹². They have never been certified with FT. Being based in the same village as FT cooperatives, it provides good, inter-community comparison.

CO#1b: Being based in the village of Mallares within the *Chira Valley*, the organization was founded in 2014 as private enterprise with no democratic structures to engage its producers, but at the moment the management attempts to transform it into a cooperative with the final goal of applying for certifications. The enterprise counts with two technical consultants and 18 workers in the processing plants. The enterprise serves as comparison, as it is based in the same valley, but spillover effects from FT cooperatives can be largely eliminated.

CO#1c: This organization is based in Buenos Aires, a village in Morropón, which is a district in 'Alto Piura' about two hours away from the Valley of Chira. Despite its geographical distance, it was taken as comparison group since it also shows cooperative structures, but no spillover effects from FT certified cooperatives could be expected. CO#1c was founded in 2006 and they count with the organic certification. 40 producers dedicate themselves to banana production, while 22 are concerned with cocoa production.

Two explorative interviews with the supply chain manager for banana from TransFair e.V. and the local coordinator of CLAC¹³, the Latin-American Fairtrade Producer Network organization, were conducted before the field trip to receive FT specific information, which could then be verified on site. Actual field research in Piura took place between 14th and 21st of January 2018. In total, 27

¹² Information on GLOBALG.A.P. can be found [here](#).

¹³ Coordinadora Latinoamericana y del Caribe de Comercio Justo; Coordinadora Latinoamericana y del Caribe de Comercio Justo

interviews with management of the cooperatives, 16 gender-balanced FGDs with banana producers and six community interviews were conducted. Furthermore, three participatory observations took place on banana plantations and ‘*cuadrillas*’, processing plants, and hard-copies of annual reports and booklets of the respective cooperatives were consulted for complementary information. Annex 7.2 gives an overview of the stakeholders included in the data collection.

3.3.2. Cocoa Case Study

Cocoa represents the most important export product in agriculture for Ghana. Behind Cote d’Ivoire Ghana is the world’s second largest producer of Cocoa. Together they provide around 68 percent of FT cocoa sold on global markets. Contrasted to overall volumes of national cocoa production (4.4 million tons in 2013/14), Fairtrade cocoa in Ghana currently amounts only to about 6.1 percent, with only about half of the cocoa production produced under FT certification actually sold under Fairtrade terms. Yet this is still higher than FT shares of other countries.

Traditionally, the cocoa sector has been one of the main backbones of Ghana for decades and not least due to this the Ghanaian cocoa sector is highly centralized and characterized by a strong role of the state in cocoa production and marketing. Central authority in this context is the Ghana Cocoa Board (COCOBOD), comprising functions like seed production, disease control, quality control, marketing and research. COCOBOD is hence the authority ultimately controlling all Ghanaian cocoa supplies and it also sets a national farm-gate price at which cocoa is purchased from all cocoa farmers, including FT farmers. Cocoa is purchased from farmers and cooperatives through authorized Licensed Buying Companies (LBCs). COCOBOD’s 2014 annual report recognized a total number of 41 LBCs of which 32 were effectively buying and selling cocoa (Ghana Cocoa Board, 2014).

Ghanaian cocoa is well known for its premium quality and therefore receives a premium on the world market of around 100-150 USD per ton in addition to the world cocoa price. As prices paid to COCOBOD were (until the 2017/18 season) consistently above the Fairtrade Minimum Price of USD 2000, cooperatives only benefited from the FT Premium, which is transferred to the cooperatives directly. The FT cooperative examined in this study is described in the following:

PO#2: The FT cooperative visited for the cocoa case study was set up in 1993 by a number of leading cocoa farmers who saw an opportunity to collect and sell their own cocoa for the benefit of the members. This happened in a time when it was for the first time possible to set up private cocoa buying companies in Ghana. In 1995, the cooperative was FT certified which made it the first FT-certified smallholder farmers’ organization. Ever since, it has been operating around FT standards. In 2015 a new organizational structure was adopted to deepen participation despite its large expansion area; the PO is now a cooperative union with 57 primary society affiliates. PO#2 is to date the only cooperative union in Ghana which owns and operates a licensed cocoa buying company to buy the cocoa from the farmers and sell it to the government buying company COCOBOD. According to the COCOBOD annual report of 2014 it is the fourth largest LBC in terms of cocoa volumes purchased. With a membership of more than 100,000 cocoa farmers in 2017 it is also the largest farmers’ cooperative in Ghana and one of the largest worldwide. FT farmers included in this study live in the villages of Kokofu, Nobewam, Bipoa and Mem.

Four villages with FT presence were selected on the basis of their inclusion in the previous study and accessibility. They comprise Kokofu, Nobewam, Bipoa and Mem and lie approximately ½ – 1 ½ hours from the cooperative headquarters in Kumasi. Due to the very unique position of the cooperative union visited (in terms of number of members, distribution across the country and ownership of one of the largest LBCs) it was very challenging to identify comparable non-FT-certified cooperatives. Ultimately, a within-community comparison design was applied, conducting 16 FGDs with FT and non-FT farmers of the same villages. Furthermore, data collection was complemented by conducting two FGDs in a village without FT presence, namely Yaase Adwafo, to control for potential spillover effects in the within-community cases. Cocoa farmers in the comparison group were either independent smallholder farmers or in a minority of cases loosely affiliated to another cooperative or organization, in a sense that they regularly sold to one particular LBC:

Independent farmers: Conventional cocoa farmers from the same villages were included in the study as comparison group. To account for potential spillover effects, additional FGDs were conducted in another village without FT presence. Non-FT farmers sell their produce to one of 32 LBCs buying cocoa for COCOBOD, sometimes even to the LBC owned by the FT cooperative. Comparison group farmers were living in the villages of Kokofu, Nobewam, Bipoa, Mem and Yaase Adwafo.

Actual field research in and around Kumasi in the Ashanti region of Ghana took place between 16nd and 23rd of October 2017. In total, 18 gender-differentiated FGDs with an on average size of 2-10 participants were held. Furthermore, 7 Key Informant Interviews with SPO management and staff and 6 Community Interviews were conducted. For the quantitative perception activity local available cocoa beans were used and ratings were recorded for 95 participants in total. Annex 7.3 gives an overview of the stakeholders included in the cocoa-case data collection in Ghana.

3.3.3. Coffee Case Study

Coffee represents the most important export product in agriculture for Peru. The country is famous for its high-quality and organic coffee production and achieves a production capacity of around 96,699 tons of FT coffee per year (TransFair, s.a.). With 145 SPOs producing FT coffee, Peru has the widest network of small-scale organizations for FT coffee worldwide. While production in Peru is spread across three zones, the area under consideration in this study is the Central Amazonas, centered around the city of La Merced, in the district of *Chancamayo*, in the state of *Junín*. The coffee producers of Junín were tremendously hit by the coffee rust plague *La Roya*, which started in 2011/12 and has not yet been fully combated. Recently, the region has experienced a substantial growth in organizations mainly caused by fragmentation of larger organizations. 51 SPOs are FT certified within the district of Junín. Subject of interest in this study is the cooperative PO#3a, one of the oldest and biggest coffee associations within the region.

PO#3a: The cooperative was founded in 1966 by 50 coffee farmers from Cajamarca after settling down and establishing the village 'La Florida' in the Peruvian Central Amazon. Currently, the cooperative is composed of 700 members, including 200 women. Their plantations are spread across approximately 5,600 ha, out of which approximately 3,577 ha are planted with FT coffee. Producer come from various villages and annexes which are up to two hours away from the village La Florida, where the collector plant is based, and up to

four hours from the city of La Merced. Farmers of PO#3a have their plantations at different altitudes influencing the quality and quantity of coffee produced.

It has been challenging to identify non-FT-certified cooperatives within the same valley. As mentioned in the 2011/12 study, the application for certification is reason per se to form a cooperative. Accordingly, non-FT cooperatives can barely be found. Time constraints did not allow to traveling to other coffee hubs within Junín to approach potential large cooperatives and then travel to their rural production sites. The identified non-FT associations which serve as comparison group are substantially smaller than PO#3a and have only been established recently. Nevertheless, they provide intriguing information on the established indicators, since they also reveal farmers' former experience of being a 'conventional' producer, i.e. coffee farmers who sell in the streets to intermediaries. Considering the exceptional situation of *La Roya* which had shaken the region in the last five years and impacted both FT and conventional producers, the perspective provides valuable comparative insights. The comparison groups are described in the following:

CO#3a: This association has been initiated by the farmers of the village Santa Rosa de Toterani, located around 1,5 hours from La Merced. They have received support by the government project *Agroideas* in the past years, which will run out in 2019. They have about 40 members and have not yet established their own clients abroad. Before forming the cooperative, all villagers were conventional farmers.

CO#3b: This association has been newly established by the inhabitants of the annex Tupac Amaru, of whom some were formerly associated with PO#3a and others had been selling to intermediaries. In total, there are 30 members at the moment, possessing 60 ha. It is a very remote annex, four hours away from the city of La Merced and poorly connected by road.

CO#3c: Since distance to urban agglomerations substantially influences livelihood of coffee producers and hence the outcomes of the study, the research team opted to include a group of conventional producers, who live in and around the village of La Florida, for inter-community comparison. Therefore, five producers were approached in their homes and accumulated to implement the FGD and the quantitative perception activity.

Two explorative interviews with the supply chain manager for Coffee from Fairtrade Germany and the local coordinator of CLAC for the Central Region of Peru were conducted before the field trip to receive product specific information, which could then be verified on site. Actual field research in and around La Merced in the district of Junín took place between 22nd and 29th of January 2018. In total, 14 interviews with management of the cooperatives, 14 gender-balanced FGDs with coffee producers and six community interviews were conducted. Part of all FGDs were quantitative perception ratings, which were recorded for 86 participants in total. Furthermore, two participatory observations on coffee collector sites and a World Bank project were conducted. Annex 7.4 gives an overview of the stakeholders included in the data collection.

3.3.4. Cotton Case Study

India is the second largest producer of cotton after China. Cotton makes up 5% of the country's GDP and 11% of its total export earnings and more than 51 million people are employed in the country's cotton industry. The majority of FT cotton in the German market is sourced from the sub-continent.

India's cotton hub is located in the Northwestern state of Gujarat, where cotton is cultivated across more than 2,600,000 ha (India Brand Equity Foundation, 2017). The study focuses on the *Saurashtra* region, which is well-known for its vast cultivation of different types of cotton.

The case of cotton farmers in Gujarat presents the only case in this study which falls under FT's Contract Production (CP) standard. This standard allows farmers, who are not yet formally and/or legally organized into SPOs to participate in FT through an intermediary organization (contractor) called Promoting Body (PB). The latter agrees upon facilitating farmers to eventually form a co-operative under the FT SPO standard. In the interim, the Contract Production Organization (CPO) is the holder of the Fairtrade certificate and responsible for supporting farmers to produce and market their cotton under FT CP standards. The CPO has contracts with each of its farmers, in which also the purchase price is defined, and offers certain services to the farmers such as trainings and the provision of agricultural inputs. Smallholder farmers under CP are represented by a Producer Executive Body (PEB), which is elected and constituted by farmers. The PEB administers the FT Premium and also receives organizational and administrative support by the CPO (Danko, Gaita, & Marasco, 2016). The FT CPO examined equals the one of the predecessor study and is presented in the following:

PO#4: The organization, headquartered in Mumbai, produces wide range of organic products and has been working with cotton farmers since 2003, focusing on organic cotton from the very beginning. It received FT certification in 2008. It is currently structured as CPO but is about to convert into a SPO. The organization works across different regions, but the *taluka* (district) of Chotila, close to the city of Rajkot and the first region they started in, was visited for this study. Contract farmers who participated stem from the villages of Lakchokiya, Pipari, Mokasar, Dharai, Pipaliya.

Field research in Gujarat took place from 04th to 07th of January 2018. FT farmers were, mostly, mobilized by the management of the CPO. Additionally, it could not be prevented that management and program teams of the CPO were present during most interviews and FGDs with male respondents, potentially causing bias in the responses given.

Non-certified farmers were mobilized by the CEval research team in the same comparison villages, which were included in the previous study:

Independent farmers: Conventional farmers of different villages within the same region were included in the study as comparison. They sell their produce in the local market to intermediaries and do not receive any external support. The cotton they cultivate is BT cotton, a genetically modified (GM) crop, in which the *bacillus thuringiensis* (BT) bacterium acts as an insecticide. Comparison group farmers were living in the villages of Jivapur and Anandpur.

In total, 16 gender-based FGDs with an on average size of 5-15 participants were held. In some cases, several questionnaires were discussed within one FGD. Furthermore, six Key Informant Interviews of the CPO management and staff and 24 Community Interviews were conducted. For the quantitative perception activity local available kidney beans were used and ratings were recorded for 133 participants in total. Annex 5.7 gives an overview of the stakeholders included in the cotton-case data collection in Gujarat.

3.3.5. Flowers Case Study

The flower industry is one of the largest growing segments of Kenya’s agricultural sector. By 2014, more than 500.000 people were employed by flower farms. While the national demand for flowers is still marginal, Kenya is ranked fourth as exporter of flowers, behind the Netherlands, Colombia, and Ecuador, and holds a global market share of 7% (van Rijswijk, 2015). Over the past three decades, the value of flower exports has increased by ten times from 10,946 tonnes (1988) to 121,891 tonnes (2011) thereby reaching an export value of 42.9 billion KES, i.e. 338 Mio. € (van der Wal & Scheele, 2015).

In accordance with these developments, FT certification plays an increasing role in the cut-flower sector. The first six flower farms were certified during a pilot project by the Swiss Max Havelaar Foundation in 2001. As of today, there are 40 Fairtrade certified flower farms in Kenya, and two are in the process of certification.

PO#5 was FT certified in 2001 amongst one of the first flower companies in Kenya and, currently, employs close to 1,500 people (including seasonal workers). Flowers (especially intermediate roses) are grown under 60 hectares of greenhouses and are directly exported to supermarkets and wholesalers in Germany, Switzerland, the UK, Scandinavia, and the Netherlands. Around 45% of its roses are sold under Fairtrade which receive a price premium of 10%. PO#5 has flower farms in the towns of Thika and Juja with its headquarters in Thika. Both towns are in close proximity to Nairobi, Kenya’s capital.

Finding an appropriate comparison group was a main challenge of this case study. Conducting research on flower cultivation in Kenya is a highly sensitive issue, due to the oftentimes precarious working conditions and environmental degradation associated with many farms with the flower industry. Several years back, these were disclosed by researchers and journalists and, while there was certainly an improvement, at least, in image, it still influences the perception of farm management towards researchers. Flower companies are therefore eager to keep researchers and journalists at a distance to prevent the disclosure of information that could lead to economic losses. With the efforts of the PO#5 community manager, nevertheless, a non-FT flower company willing to participate in this study could be identified:

CO#5 is based in Juja and part of a globally operating Group headquartered in Stuttgart, Germany. During high season, CO#5 employs around 1,000 workers of which almost three quarters are women. Furthermore, it has received several certifications from the MPS group which CO#5 also require certain ecological and social standards that are audited frequently.

While not being FT certified, CO#5 has good reputations in regard to adhering to social and ecological standards which probably contributed to its willingness to participate in this study. It might, hence, not be representative to its fullest for standard flower farms in the region. Nevertheless, discussions with workers from CO#5 enabled valuable insights into a non-FT Farm. Moreover, a significant number of workers of PO#5 and CO#5 live in communities where workers of other non-FT flower farms lived as well, allowing the research team to ask a number of comparative questions about working and living conditions at other farms of which workers of both groups were quite well informed. Field research in Kenya was conducted between 1st and 7th October 2017. Over a period of

six days, 16 gender-balanced FGDs and 23 KIIS with community representatives, managers and workers' representatives were conducted. Members of the FGDs were predominantly mobilized by the management of PO#5a following a convenience sampling approach with workers working closer to the factory being asked to participate in the FGDs. While the research team had the impression that workers were picked relatively random, selection bias cannot be ruled out completely in the regard that the farm management might have deliberately not invited the most critical workers. An overview of stakeholders included in the flower case is given in annex 7.6.

3.3.6. Tea Case Study

India is both the world's biggest producer and consumer of tea. In 2016, total production equaled 36 million kilograms. The Darjeeling region is well known for producing high quality tea thanks to several favoring factors such as its climate, soil conditions and altitude of about 600 to 2,000 meters. Under normal conditions the region produces up to 10 million kilograms of tea on roughly 17,500 hectares which are divided into 87 tea estates. Due to the hilly and steep terrain, tea companies face high production and input costs. The yield is comparably low (400-450 kg/ha) compared to the national average of 1,800 kg per hectare and soil preparation can only be done manually. The companies also face high costs when transporting the picked leaves from the plantation to the factories and then to transport the tea from the processing sites to the warehouses in the harbor town of Kolkata (Datta, 2010). The study on FT tea was the only case where a comparison between a FT and a non-FT tea farm was not possible. Reasons comprise, among others, high political sensitivity of the tea sector due to its colonial past, being accelerated by a recent strike, as well as critical research published and a documentary harshly lamenting labor conditions on Indian tea farms in 2017. The latter caused substantial distrust, impeding data collection on non-FT tea gardens. Issues faced in the study at hand strongly resemble the attempts made during the previous study, where the research team was not able to get permission to conduct research at a non-FT tea company. Thus, it was decided to examine again the same FT farm as in the previous study¹⁴:

PO#6 has a total gross area of 347 hectares of which 140 hectares are used for tea plantation. PO#6 now employs a total of 369 workers (including absent workers) compared to 480 workers at the time the last study was undertaken. It was certified under FT in 2001. Workers live in five different villages located in different areas of the farm.

Research at the tea farm was conducted between 9th and 14th of January 2018. Eight Focus Group Discussions as well as 29 in-depth interviews with workers' and tea garden management representatives, health personnel, and community representatives were conducted. However, because of the under-representation of male workers, only two FGDs with male groups could be led at PO#6. Around two thirds of FGD participants were selected by the farm management, hence potentially entailing a bias in the selection of the workers. To, nevertheless, improve the representativeness of stakeholders included, the research team randomly identified union staff and members of the Fairtrade premium committee for individual interviews. Findings of different views could, thus, be triangulated well. Annex 7.7 shows all stakeholders included in the tea case.

¹⁴ In addition, a second FT farm was examined to assess differences and commonalities between the two certified farms, especially in respect to their duration of being certified. Findings on the second FT farm are not described in this study but will be shared with FI and local stakeholders in a separate report.

3.4. Limitations of the Study

The study design goes along with certain limitations with two crucial remarks being made beforehand: Firstly, as originally planned, a double-difference design with comparison group data for 2011/12 could not be implemented as former comparison groups could not be traced. Moreover, the finalization of the FT ToC after the conceptualization of the earlier study required substantial changes for the analysis grid and the corresponding data collection instruments. Quantitative surveys did not longer provide methodological sound and comprehensive enough information in this regard; therefore, they were skipped in favor of a comprehensive case study design which yields to insights on the social, the economic and the ecological dimension in line with the COSA indicators. Secondly, in general, the qualitative design of the study does not allow to derive statistically representative results. Nevertheless, the explorative design allowed to capture typical trends which were cross-validated through the discursive setting of FGDs. The following additional limitations -often specific to single case studies - need to be articulated:

- In the case of SPOs in Peru, the identification of an adequate comparison group was challenging, as often the reason for forming a cooperative is to pursue certifications. It left the evaluators with approaching relatively new and small organizations, who do not have FT certification (yet). This limitation was already outlined in the 2011/12 study.
- FGDs are very useful to promote inclusiveness of research studies and give voice to a broad range of community members. However, there are always power dynamics taking place within a group with one or two ‘leaders’ taking the word and being dominant during the discussions. Considering this limitation beforehand, measures were taken to mitigate potential bias: The gender division helped women and men to speak more freely about their specific problems without being scared or ashamed of the opposite gender. Furthermore, name tags were prepared for everyone, including the research team, to not only encourage participation by calling out their names, but also symbolizing equality among everyone.
- Circumstances led to the exclusion of few stakeholder groups. For instance, in the case of Peru and tea, teachers were on vacation from December to March and thus could not be interviewed during the time of data collection. Still, facilities were visited and specific questions on missing issues were posed to other stakeholders to compensate for the lack of information caused by the absence.
- In the case of cocoa and cotton personnel of the cooperatives were present during the FGDs. While the research team intended to avoid this situation, it was not always possible to exclude staff. This might have intimidated the participants in a few cases, and consequently, might have influenced the results. However, the vast majority of FGDs were conducted without the presence of non-discussants.
- In some cases, farmers/producers came directly to the facilities of the cooperative. It proved to be much better, when the research team came to their villages/houses to gather producers over there. By doing so, observations of their living conditions as well as quality of life were made, providing additional and indispensable insights to assess indicators of interest. This process could not always be steered by the research team, since some cooperatives, being very professional when it comes to visits, took charge in organizing

producers for the data collection themselves even before the research team arrived. The research team tried to mitigate this through adding additional farmers/producers for further data collection.

- Participatory seed assessments are a useful way to quantify qualitative assessments, however, they can bring along a few challenges when applying it among communities with lower education levels. In this study, the research team attempted to facilitate the understanding of the participatory assessments through visuals and clear examples. Nevertheless, there might be the possibility that few participants did not understand the exercise to its full extent and hence provided ratings that did not match their realities completely. However, results suggest that such bias may only apply for very few respondents if at all.
- Interference due to elections in Kenya and political turmoil in Darjeeling, India tremendously delayed the evaluation process. Extensive communication with representatives on the ground facilitated, however, data collection on the ground and hence allowed a follow-up on all case studies selected for the 2011/12 study.

4. Findings

4.1. Economic Dimension

Recognizing the COSA economic dimension research areas, the following section elaborates on income and revenues, diversification, information, credit and financial services, vulnerability, differentiation, infrastructure and other development services. Firstly, results to each area are illustrated for the six cases, while then cross-sectional findings and the longitudinal development, comparing findings of the 2011/12 study and the current one, are described. Results of the quantitative seed assessment complement findings on the economic dimension.

4.1.1. Banana Case Study

General Remarks

In the banana case, four FT certified cooperatives of the Chira Valley were clustered. By doing so, not only differences to non-FT cooperatives could be explored but also differences between the FT ones, allowing to identify impeding and supporting factors that influence the institutionalization of cooperatives as well as outcomes for their producers along the COSA research areas. A second remark that needs to be made is that for producers the biggest positive change came along with export, starting in the early 2000s, and the subsequent increase of control over the value chain before shipping. Sometimes when inquiring about their situation five years back, producers referred to the time before exportation instead. In the following section, the authors mention the occurrence of the same, whenever needed. Lastly, two extraordinary events occurred in the last five years that are worth mentioning. In 2012 the plague *La Mancha Roja*, caused by the trips insect emerged in the region. The trips insects weaken plants and cause blemishes on fruit, leading to vast batches being rejected by European importers. The plague temporarily slowed down the production and export volume of all associations in the region. In addition, in 2017 the El Niño phenomenon hit the region,

causing flooding and inundations across the valley and washing away a substantial share of banana plantations, including some of FT certified POs.

Income

In general, the SPOs with FT consider that their income has slightly improved in the last five years. According to a female producer, “they were at 90% of what they are now”. The more significant change came along with the exportation about ten to fifteen years ago, when FT and non-FT producers experienced a high increase in price and continuity in sales. While, before exportation, fruit was often wasted in summer once the national market was saturated, today farmers can sell their entire harvest and receive regular income all year long. In the last five years, the prices have been quite stable: The current price per box for exporting FT organic banana is still above the minimum price set by FT, which is 12,5 USD Free-on-Board (FOB) per box of 18,4 kg. The strongest SPO achieves a price of 13.70 US. In the last years, the price for banana has been stable. However, according to the local FT expert and several managers of cooperatives, on the one hand, input costs are increasing and on the other hand, tendencies show that the price for banana could further reduce in the near future due to rising competition.

FT banana farmers, except the ones who are part of the cooperative who has been recently decertified and thus agreed in their general assembly to lower the price, receive a higher price per box of banana than non-FT organizations. One non-FT association sells organic banana to the national market, including to large super market chains, and receives a substantially lower price than the rest. Recently, they lost both their organic and Global GAP certification, which will lower their price even more. Another association of the comparison group, which acts as private enterprise and, currently, pursues the conversion in a cooperative, sells organic banana to a bigger private player in the region who then exports the fruit. Astonishingly, the price non-FT farmers apparently receive here is comparable to the one of FT organizations.

Banana producers are very price sensitive. The apparent small difference in price – between 6 and 7 Dollars per box after discount of the exportation process – strongly determines differences in livelihood and saving behavior. According to producers, it is very difficult to save with an average price of six Dollars, whereas farmers receiving seven Dollars state that their economic situation has improved over the years and that saving is possible. Lastly, one important factor is liquidity available to pay farmers on the spot for their produce. While the one FT cooperative that appears to be the strongest, counts with enough liquidity to do so, the decertified one has recently failed in paying their farmer directly and payments were delayed. This does not only cause insecurities, but also hampers farmers’ individual potential to invest in measures to improve quality and productivity in their plantations. It is difficult to identify the average income of a FT or non-FT producer¹⁵. Net income highly depends on the size of the banana plantation, productivity and cost of production. Productivity plays an important role as it can vary, for 1 ha of land, from 1300 to 2000 boxes produced every 15 days. These differences in productivity depend on the quality of the land, the investment made during the process, the availability of water, technical assistance and the dedication of the producer. To achieve better productivity, additional support of the SPO is

¹⁵ FI has commissioned a study on the “External Cost of banana production” to calculate true social and environmental costs of cultivating and compare the external costs of FT and conventional production. The study concludes that FT producers have on average lower external costs. Please find the study [here](#).

fundamental to maximize production, to be able to advance supplies that are later paid with the product, as well as being guarantor for loans, and providing training to its members, among others.

The FT organizations that have found themselves in a bad financial situation and the majority of those that do not have FT, cannot offer these services adequately to their partners. Finally, the costs of production, such as packaging and cartons, are another fundamental factor which determines income. SPOs that provide adequate technical assistance and advancement of inputs have been able to reduce it to 3.15 dollars per box, whereas in SPOs that do not give these supports, it can rise up to 5.50 dollars per box, resulting in marginal profits per banana box. To, nevertheless, give an estimate of the average net income, it can be said that a producer with 1 ha of the two strongest FT SPOs earn between 1000 and 2000 Peruvian Soles a month, which lies quite above the recently set state minimum salary in agriculture (i.e. 950 Soles / month).

Diversification

Opportunities to diversify depends on the possibility to hire labor on plantations. If this is not the case, cultivating banana is a time-consuming practice, which does barely allow to engage in other income generating activities. Hence, 80-90% of small-scale banana producers only depend on income generated by cultivating banana. In the cases of two FT certified cooperatives, we could see some examples of both women and men diversifying their income sources: Some women engage in cake making or teaching, some men cultivate rice. Some families in more rural areas practice animal husbandry. In the comparison group, the picture looks similar. However, many men of the non-FT group stated that they are forced to take up other activities, such as being workers at processing plants for other cooperatives in the valley, to complement their monthly income, as profits generated with their own cultivation is often insufficient to cover monthly costs.

Information

The level to which farmers are informed about the market and prices depends on their education, but also on their interest and motivation to understand determining factors. According to the management of one FT SPO, "some understand the factors, some only demand." One farmer mentioned that slowly they have understood the basics of technical and economic knowledge that is needed in their field. Most farmers are aware of risks that could influence their production and income and are well sensitized that quality is of utmost importance to achieve a good price. Farmer, usually, only inquire the price at the beginning of a year and compare it to the years before. A decline in price often causes worries and uncertainties. Yet, there is a solid amount of trust towards the directives of the cooperative. Most FT confirmed that they trust their administration to do what is best for the producers and the cooperative. Most FT farmers of the stronger FT SPOs are aware of the FT certification, but mostly only refer to the premium, which they highly appreciate and value. In rare cases, farmers could recall and name detailed standards requirements, but the majority of *bananeros* confirmed their application in daily work when discussing different practices explicitly.

Credit and Financial Services

FT and non-FT farmers confirmed that they have access to credits from banking institutions. Overall, credit mechanisms and institutions have improved in the last five years, leading to faster transactions and opportunities for larger credits. One important factor is the proximity to the urban center of Sullana, which enables credit institutions and staff to reach the *bananeros* of the region. At the same

time, farmers have become more confident to ask for credits and manage their duties. Yet, conditions for each farmer are different, depending on their land and productivity.

Most FT cooperatives established a system to give out limited loans to their farmers. When receiving a credit from their association, pay-back is, generally, done by discounting their produce. FT Farmers mentioned that these loans can be used for personal investments, such as, for instance, housing, motorbikes or education fees. Saving across all farmers is limited though:

“Here is a saving culture but very little, in general, the Peruvian man is not a saving person. Those who save, save a very small amount.” (Male farmer, FT, BANANA_FGD_8)

Vulnerability

Banana farmers in the region had to face a natural disaster in 2017, as the recurrent phenomenon of El Niño caused severe flooding in the region. Main effects of the rains were that banana plants were washed away, leading to the loss of several hectares of plantations, and streets to get access to plantations were blocked. Consequently, production affected was substantially lower in the following two years – something which also some European supermarkets had to struggle with. A second development was the occurrence of the plague *La Mancha Roja*. Both externalities had an impact on the resilience of producers, who required a functioning support system to recover from the shocks caused. Evidence was found that producers of all four FT cooperatives, received sufficient help, especially in terms of street recovery, new seedlings, organic fertilizers and plague protection. This additional support was mainly financed by the FT premium, which was considered a parachute in times of emergency. The Peruvian government provided additional support through a rescue plan for the region, which reached producers of FT cooperatives as well. The majority of FT producers were, hence, able to overcome the emergency situation and are, mostly, back to normal production levels. Interestingly, one manager of the strongest FT SPO stated that the premium is, indeed, valuable in times of emergencies, however, they are no longer depended on it and are financially sustainable to survive on their own. One incident was reported, where even the banana farmers themselves were donating their produce to support the ones who had suffered most from the disastrous situation.

Producers of non-FT cooperatives stated that no support by their association was given. Especially in the cooperative, which is based in Alto Piura, losses due to the phenomenon were huge, but no help was provided neither by the cooperative nor by NGOs. The financial help announced by the Peruvian state had not reached the producers, since they do not possess land titles for their plantations – a factor which makes them extremely vulnerable.

Still, there are recent developments that jeopardize future resilience of banana producers in the region. FT producers, in all discussions, mentioned the emergence of grand plantations as major risk. Competition towards plantations in Mexico and Dominican Republic has increased. At the moment, Peru only counts two FT HL banana plantation, which lie in a different area of the country, however, several plantations emerged in their own valley, which have the organic certification. FT producers fear that these plantations, in the future, will pursue FT certification, as well, which would represent high competition for the FT SPOs. Furthermore, the emergence of big SPOs, integrating large hectares of plantations per member, and the suspicion that the management created “hidden” cooperatives while solely following their own agenda, led to a change in the SPO banana standard for

Ecuador, Colombia and the Dominican Republic. A limit was set on the farm size per member, only permitting members with less than 8-10 ha¹⁶.

Considering these developments, many FT producers expressed worries, stating that large plantations are always led by “*people of money who will damage the system, which is doing well right now*”. The case of the US-American company Dole has caused discontent among producers. When starting their operations in the region in 2011 and purchasing banana, partially FT certified, from SPOs, Dole initiated its own CSR program via de Dale Foundation (*dale* means *giveme*). The CSR activities, partially, resembled FT activities financed by the premium: Mobile Health Services were set up and schools were supported. However, five years later, the Dale Foundation has stopped its social activities completely. It still buys from SPOs, however, and also started its own organic, non-FT, large-scale plantation. According to most SPOs, there is no longer communication or joint initiatives between SPOs and Dole, except for formal business relations. Critics state that Dole attempts to weaken SPOs by acting as intermediary to clients abroad, undergoing market prices, and creating parallel organizations within the same export region (Agronomes et Vétérinaires sans Frontiers, 2011).

Differentiation

The FT cooperatives included in the study were among the first associations who received the FT certification in the early 2000s. All of them are additionally certified with the organic certification and GLOBALG.A.P., a standard for good agriculture practice. The latter is a basis certification on environmental and hygiene issues, which is a pre-requisite to enter the European market and be accepted by retailers. It covers different aspects than the organic certification and, hence, cannot be replaced by it. Most management representatives stated that FT was the most demanding one among the certifications. To achieve FT certification, at least one year of preparation was necessary.

Infrastructure

In terms of infrastructure, SPOs show significant advancement compared to non-FT organizations. All four FT cooperatives included in the study can rely on well-built and maintained office and processing buildings. Here, the administrative staff is based in several smaller offices, inputs are stored, and fruits are on-site processed, i.e. packed in boxes and loaded in trucks for shipment. One observation that could be made is that in these buildings, attempts are made to foster organizational culture: Logos are painted on the outside, working principles are shown on posters, a birthday calendar is put up, and updates, e.g. on plague treatment are printed and shared on walls.

Furthermore, the FT premium has been invested in the following infrastructure:

- Production and processing infrastructure (packing stations, irrigation canals, roads)
- Institutional infrastructure (improvement of equipment and premises of headquarters)
- Capacity building for management, members and community

In addition, the premium has been further used for the following:

- Improving the cost structure of the producer (providing cheaper inputs, improving economies of scale, improving efficiency)

¹⁶ For more details, please see the official FT document [here](#).

- Social infrastructure (schools, health centers, water treatment plants, toilets in villages)
- Social welfare for members and non-members (help for the elderly, children, the sick)
- Basic health services (access to doctors)

To realize these investments, it was reported that FT organizations often cooperate with local municipalities and achieve a cost-sharing model. Local governmental institutions actively seek support from associations to realize community investments or social campaigns. This is remarkable, since, apparently, not only financial, but also institutional capabilities in terms of negotiation and partnership management, have increased, turning associations into a key stakeholder in community development.

One important change in infrastructure, that was mentioned throughout the FT FGDs, was that the additional income gained through export and FT has allowed farmer to acquire motorcycles or even cars for transport, whereas several years ago donkeys were the most common mode of transportation. The disappearance of *burros*, donkeys, was mentioned throughout the FGDs as metaphor for progress in infrastructure. Similarly, roads have improved significantly in the last years, enabling better day to day access to the plantations, which is of utmost importance in times of heavy rains. In addition, housing improved for most FT members, allowing them to invest in renovation and expansion of their homes. Interestingly, this does not only have an effect on quality of life of producers, but it also changes the perception they have towards their village: A certain degree of pride towards their origin could be detested among the producers with a group of them mentioning the following:

“It is no longer strange to live in a village [...] Villages are emerging: There are good streets, noble homes, motorcycles and taxis and no more donkeys!” (Female farmer, FT, BANANA_FGD_1)

Non-FT associations, of which two had been founded quite recently, do not own an office by themselves, but had to rent it out, or have a very small office as of now. The one cooperative in Alto Piura had large land available and some office facilities, however, these were emptied out at the point of visit, as most staff had to leave due to financial issues of the cooperative. Several representatives of non-FTPs stated that they would like to achieve the same growth in infrastructure as FT SPOs.

4.1.2. Cocoa Case Study

Income

Looking at the overall cocoa production circumstances in recent years, declining world market prices for cocoa and a running inflation of the national currency together with dry spells that led to poor harvests (especially for the 2014/15 and 2015/16 seasons) have affected both FT and non-FT cocoa farmers. As the cocoa market in Ghana is highly centralized with a prominent role of the governmental agency COCOBOD in buying and selling crops, farm-gate prices for cocoa farmers are also centrally determined by this agency for each farming season, usually at the beginning of October. Irrespective of the intermediary Licensed Buying Company (LBC) the farmer decides to sell to, a nationally identical farm-gate price is paid to each cocoa farmer. Price differentials may only arise through the additional payment of bonuses (as is also the case for the FT cooperative union visited). For the 2017/2018 season this fixed farm-gate price each farmer gained per bag (á 64 kg) amounted to 475 GHS (equiv. 106 USD / Feb2018). This price was maintained from the 2016/17 season despite declining world market prices for cocoa.

FT cocoa farmers shared a generally positive assessment of their income situation. FGDs among both men and women in different communities revealed that this was primarily attributed to a continuous increase in cocoa yields received from their farming activities. While this increase in yields could not be underpinned by a quantitative review of farm records, it was noticeable that this view was shared across all FT focus group discussions. Asked about explanations for this increase in yields the most frequently mentioned aspect related to trainings on sustainable agricultural practices the cooperative members received on a regular basis through the cooperative union’s extension officers.

Asked about their ability to save, almost all FT farmers stated that they have a bank account for formal saving. Additionally, some farmers also save informally at home. Reasons for saving formally are described in terms of theft prevention, prerequisite for acquiring a loan or self-restraint (to prevent spending readily available cash). However, cocoa farmers manage to save to very different extents. While quite a number of FT farmers save only a small part, some report being able to save between 30% - 40% of their income from cocoa farming. Male and female farmers alike save primarily for unforeseen events, their old age or the education of their children. Next to personal needs (clothing, food), health care, farm inputs, electricity, care for elderly family members and church, the education of their children takes up the most substantial portion of income expenditure. In cases where FT cocoa farmers are not able to save part of their income, it is usually due to some unforeseen event like a sickness among family or because of the cost of their children’s education.

“Our incomes have improved as compared to 5 years ago. This is as a result of the trainings we receive from PO#2 and the application of these trainings on our farms. Five years ago, we weren’t managing our farms properly in terms of weeding, cutting of excess branches, spraying and growing of shady trees. This affected our yields negatively and reflected on our incomes.” (Female participant FT COCOA_FGD_5)

An income issue mentioned by both FT and non-FT farmers dealt with the payment modalities of the different LBCs. Generally cocoa farmers prefer to be paid immediately upon delivery of their cocoa to the local purchasing clerk. If, however this is not the case because the LBC cannot dispose of sufficient funds, desperate or cautious farmers are inclined to take their crop to a different buyer. Some FT and even non-FT farmers reported that this was also an issue within the FT cooperative union, as with most other buyers, during an economically difficult season (2014/15 and/or 2015/16). Hence farmers under these circumstances could only be paid in hindsight. As long as there is no financial emergency, FT farmers seem to trust this practice, by and large. Among some non-FT cocoa farmers this, however, fueled mistrust and they nowadays prefer to sell to the government affiliated Produce Buying Company (PBC) directly as they advertise to provide ready cash. One farmer, however, reports that also PBC used to purchase farmers’ cocoa on credit in the previous years.

Non-FT farmers’ assessment of their income situation was generally more negative, especially in their valuation of past years. In their views, yields have been declining due to inadequate access to farm inputs. Also, the majority report that they very rarely received trainings on good farming practices. This contrast is less evident for non-FT farmers who are members of another cooperative (e.g. initiated by Armajaro under the Cocoa Life program, a supplier of Mondelez) through which they receive bonuses and occasional trainings. Some non-FT farmers, however, highlight that prompt payment by their cocoa trading partners can provide some form of relieve in the short run. The majority is able to save at least some part of its incomes.

“Our situation is not any better as compared to 5 years ago. Our yields from last year and this current year have been poor and this has affected our incomes. Therefore, we are worse off now.” (Female participant non-FT COCOA_FGD_10)

Diversification

Cocoa has long been one of the main income sources in rural Ghana and the Ashanti area in particular. As the world’s second largest supplier in cocoa, Ghana employs some 3.2 million farmers and workers in the cocoa sector, while almost all cocoa grown in the country is produced by at least 865,000 smallholder farmers on an average farm size between 2 and 3 hectares. (Cocoa Research Institute of Ghana, 2017) The average farm size of FT cooperative members is currently reported at 6.8 hectares. (Fairtrade UK, 2018)

Both FT and non-FT farmers interviewed engaged in various farming and livelihood activities. For FT cocoa farmers cocoa seemed to provide the main source of income, while other agricultural activities such as growing yam, plantain or cassava were mainly for subsistence and only on few occasions for trading. Some FT farmers had previously been engaged in trading clothes or kitchen utensils or livestock keeping. Among non-FT farmers other income activities sometimes surpassed income from cocoa farming, which was attributed to lower productivity of cocoa farming or better revenues from agricultural products like cabbage or maize; trades like selling cement, agrochemicals; or services like running a drugstore, being a teacher or receiving pension.

What stands out from discussions with FT cocoa farmers are trainings on alternative income generating activities especially for women cocoa farmers through the cooperative union. In these trainings new income sources like tie-and-dye, soap making, *garri* processing (making cassava powder) or palm oil production as well as ginger and rice farming were taught, which was very well received by both men and women. As part of the gender program of the FT cooperative women groups could later apply for micro loans to build up small businesses around these skills. It is however mentioned that after an NGO providing a local gender group with such loans for soap processing terminated its activity in the region, the group could not produce soap in large quantities anymore due to lack of funds. Furthermore, a cooperative union pilot project on income diversification using yam cultivation was mentioned by a management officer; this project aimed at diversifying farmers’ income to reduce their overdependence on income from cocoa and provide them with alternative income sources during cocoa low seasons. This project was started in partnership with other NGOs and actors in 2014 and is currently implementing a large pilot (2018). Other income or subsistence generating activities mentioned by both FT and non-FT farmers alike were: cassava, rice, maize, plantain, banana, ginger, cocoyam, garden eggs (a type of eggplant), cabbage, okra and yam.

Information

Information on cocoa prices is quite transparent for both FT and non-FT cocoa farmers in Ghana. As the Ghanaian cocoa sector is extremely centralized through COCOBOD, it is very clear for both groups at which rate a bag of cocoa can currently be sold. For each season a centrally fixed price is determined by the Producer Price Review Committee (PPRC) of COCOBOD and announced publicly through mass media like radio programs. FT farmers also report that they learn about the new prices through the cooperative union’s extension officers. Farmers are generally also aware that prices somehow reflect the developments in the world market price on cocoa and argued for instance that prices for this season were not increased by the government due to declining world market prices.

World market prices have fallen dramatically – more than 40% between beginning of the 2016/17 and 2017/18 season. Access to farm-gate price information can hence be described as rather high for both FT and non-FT farmers. How exactly this set price is calculated and which variables affect it, however, is not easily comprehensible.

The discussion about the amount of both government and cooperative union bonuses on the other hand is characterized by greater uncertainty. Both FT and non-FT farmers however know that they are entitled to an additional government bonus. As this bonus is already factored into the farm gate price of 475 GHS paid to the cocoa farmers, the exact amount of the bonus – 5 GHS per bag – is not known to all farmers, as the following statement illustrates:

“We don’t know the exact bonus amount per bag of cocoa but we know the government pays us in addition to the price of cocoa. The bonus we receive from PO#2 is 4 GHS per bag of cocoa and it’s higher than the government bonus.” (Male participant FT COCOA_FGD_13)

The statement also shows that the amount of the additional FT bonus is not always unequivocal, as some farmers thought it was 4 GHS and others 5 GHS, which was confirmed by cooperative union staff. This bonus is also paid per bag and usually disbursed at the end of the season. The amount of this additional FT bonus is determined annually together with the utilization of the FT premium.

Credit and Financial Services

Even though the majority of FT cocoa farmers reported having a bank account used for savings, the great majority has not taken an official loan so far. The more common option if they needed one was taking an informal, small loan with their local cocoa purchasing clerk. This option was sometimes even open for non-FT farmers. Furthermore, it was reported that women’s groups under the gender project used to have access to micro group loans to start side businesses in an attempt to create greater income diversification. While in some villages an NGO was mentioned that had once facilitated the acquisition of micro loans, the cooperative union had formerly also disposed of its own credit union. At the time of research however, this credit union has not been operating for a number of years. Reasons named in this context were the farmers’ inability to repay. In a press release of the cooperative union it said the credit union *“has been bedeviled with various problems that have resulted in it failing to perform its core duties of inculcating the culture of savings and facilitating credit/loan in the form of farm inputs and/or cash to members”*. Against this backdrop, the board and management of the cooperative union have voted in favor of revamping the credit union for the future.

Among both FT and non-FT farmers one major issue mentioned was their inability to access substantial loans in order to invest in their farms. According to FGDs, current investment into cocoa farms lies between 300 and 1000 GHS (approx. 66 - 220 USD) per season. It was mentioned that with these amounts farmers are not able to make the necessary major investments into their farms (e.g. plant new trees after 20 years of farming activity) which in the long run diminishes their productivity. Against this background, recent developments in one village have to be highlighted in particular: Both FT and non-FT FGDs and individual interviews in one community mentioned a relatively new approach of one company (*Adwumapa*), which has recently advertised making necessary major investments on people’s cocoa farms during a three-year period. In this time farmers would practically be employed on their own farms and obliged to sell their produce to the company. It is

noteworthy, that in their desperation to open up major investments, various cocoa farmers, even one opinion leader affiliated to the cooperative union, were considering this option.

Vulnerability

Vulnerability of cocoa farmers in Ghana is primarily characterized by limited income diversification with cocoa as the main income source, the effects of climate change in the form of considerable dry spells, inadequate insurance measures (e.g. agricultural insurance, substantial savings) and sharp price deterioration in world market prices of cocoa over the last years. Issues like continuously aging farming population, serious inflation and hence continuous increase in prices for (imported) farm inputs pose additional challenges. In FGDs farmers themselves identified erratic rainfalls and consequently bad harvests as well as common cocoa plant diseases and plantation fires (due to excessive sun or improper slash-and-burn) as most worrying issues threatening their livelihoods. On this aspect FT farmers seemed to be aware of certain measures they could take to minimize these risks, e.g. in the form of proper farm weeding, planting of shady trees or pruning of cocoa trees. This knowledge was voiced less frequently among non-FT farmers. In cases where cocoa farms were lost due to fire outbreaks, farmers reported being significantly thrown back both economically and emotionally. In cases where farmers owned the land, they typically coped by subsistence farming. Vulnerability can however be more pronounced in cases where farmers only cultivate leased land, which they are then no longer allowed to work on. FT and non-FT farmers alike were trying to build up savings for unforeseen short-term events like illnesses, lacked however (access to) funds for substantial investments to maintain (fertilize, spray) or modernize their farms for future years, provided it is their own farm. Looking at the concept of insurances, agricultural insurances are not an issue in cocoa farming in Ghana. Neither FT nor non-FT farmers were familiar with this concept. One participant summarized:

“Aside the risk of fire outbreaks and poor weather, the major risk we are faced with is the inability to access loans to invest on our farms. We are also incapable of buying the required quantities of chemical inputs to spray our farms.” (female participant, non-FT, COCOA_FGD_10)

Interestingly, the dramatic reduction in world market prices of more than 40% between the 2016/17 and 2017/18 seasons was not brought up as threat in discussions with the farmers themselves. This does speak to the importance of the stabilizing function of COCOBOD, which despite these developments decided to maintain the previous year’s farm-gate price¹⁷. Losses for the government are consequently estimated to approximately 1.1 billion GHS. As Ghana’s economy is still very dependent on selling the raw commodity, with little domestic processing and refinement, it is very vulnerable to such price drops on international commodity markets. Against this background government authorities have announced their intention to work toward increasing domestic processing to a minimum of 50% of annual production by 2020. Under these circumstances and in light of improved education, increasingly fewer young people take to cocoa farming and rather turn to “white collar jobs”, as one interviewee puts it. In the medium to long term this may induce a shortage of the next generation of cocoa farmers and a threat to the Ghanaian cocoa sector in general.

¹⁷ Ghana and Cote d’Ivoire, who account for roughly 60% of global output communicated about appropriate measures to address this price drop synchronously in order to prevent smuggling.

Differentiation

Set up in 1993 and FT-certified in 1995, the cooperative union visited for this case study has operated around Fairtrade standards ever since. Only recently it was also certified according to UTZ (2017) and Rainforest Alliance standards (2016). Cooperative union management staff saw different strengths attached to each of the certification standards: while Fairtrade was seen to focus much on social aspects like participation and transparency, UTZ's focus was seen in the aspect of productivity and Rainforest Alliance in the field of environmental protection. It was also added that the latter posed rather harsh requirements in attaining this additional certification.

In interviews with cooperative union management it was put forward that one reason for this development can be found in unsatisfactory sales under the Fairtrade scheme. This has to be interpreted in light of the specific sales structure present in the Ghanaian cocoa sector: As the cocoa sector has traditionally been one of the backbones of the Ghanaian economy, it used to be and still is highly centralized. Comprising also functions like research and seed production, COCOBOD can be said to control all Ghanaian cocoa supplies. These are obtained from farmers and cooperatives through authorized LBCs. COCOBOD's 2014 annual report recognized a total number of 41 LBCs of which 32 were effectively buying and selling cocoa. COCOBOD is ultimately the only organization being able to sell Ghanaian cocoa to local grinders and export it on the international market. Hence its primary goal is to sell as much cocoa at the highest possible price. Since however the world market price usually surpassed the FT minimum price of USD 2000 per metric ton (MT) and the Fairtrade premium of 200 USD per ton goes directly to the cooperative, there is very limited incentive on part of COCOBOD to search for sales channels for Fairtrade-certified cocoa. In addition, Fairtrade cocoa production still makes up only a small portion of overall cocoa production in Ghana (around 3% in 2013/14). Consequently, of the total amount of cocoa produced under Fairtrade-certification in Ghana, only around 50% were actually sold on Fairtrade terms in the 2013/14 season. While FT sales in Ghana added up to 26,700 MT for the 2013/14 season, the one FT cooperative union visited already produced almost twice as much (48,283 MT) in 2013 (Fairtrade UK, 2018). Globally and especially in comparison with the primary cocoa producer Cote d'Ivoire (around 20% of national production are sold under FT terms), Ghana's FT share can be considered decent. Looking for instance at the top 5 countries' FT cocoa production in 2014 (213,000 MT) and contrasting it with FT cocoa volumes sold of all countries at the same time (70,600 MT), a figure of less than one third is suggested (Fairtrade International, 2015).

FT FGD participants usually knew that the cooperative union was part of the Fairtrade scheme. As this specific cooperative union is however a special case, having more than 100,000 members and a strong branding, farmers rather saw themselves as members of the cooperative union than as participants in Fairtrade. Fairtrade and the union's name were often used synonymously.

Infrastructure

In the majority of the four communities visited during the FGDs, some sort of infrastructure development facilitated by the FT premium had been implemented. As the cooperative union, however, has more than 100,000 members organized into about 1300 communities in 57 districts in 6 cocoa growing regions, the FT premium and infrastructure development observed during this field study is not representative of the PO's entire FT premium use and its geographical distribution.

In the four communities visited, FT premiums facilitated the following community infrastructure projects: construction of a toilet facility, roofing of a local school and provision of sports kits for school children, building of a borehole, acquisition of a maize milling machine as well as provision of grass cutters (small farm animal for meat production). Also, the mobile clinic financed by the FT premium has attended to some of the communities. Nevertheless, both FT and non-FT farmers are generally not satisfied with the level of infrastructural development happening in their communities. According to the cocoa farmers the major challenges can be found in the area of road networks and accessibility, but also issues like water and toilet facilities were named. Even though part of the FT premium received by the cooperative union is used to finance infrastructure projects, the discussions in the various communities suggest that the impact on overall infrastructural development has not been substantial.

Infrastructural community projects realized, were usually accessible not only to FT farmers but to the wider public, meaning that the entire community benefited from the presence of FT in these instances. For the pure control community visited during the field trip this, in contrast, this was not the case. Within the community where a borehole had been constructed, also the non-FT members knew of its existence and used it. One FT FGD participant however added on the matter of usage:

“Though the amount paid for water at the borehole is cheaper, most people within the community prefer the mechanically constructed one because it doesn’t require any form of energy to pump as compared to the borehole.” (Female participant, FT, COCOA_FGD_5)

On a more general note, it could be observed that infrastructural development in the communities was characterized by many private and non-profit actors to supplement government activities. Usually the provision of electricity was in the hands of the government. The ever-growing population in the various communities however puts additional pressure on the newly built facilities. This was for instance voiced in relation to the premium-financed toilet facility, where functionable capacities were said to be reached.

4.1.3. Coffee Case Study

General Remarks

The coffee producer included in this study encounter themselves in an out of ordinary situation. They have experienced a range of setbacks in the last five years, which had a major impact on all spheres of life for them. The most prevalent crisis they encountered was the emergence of *La Roya* – coffee rust – a fungus that has aggressively destroyed coffee plants and led to an aerial loss of plants and parcels across the Amazonian region. The coffee rust crisis of 2013-2015 has been the worst crisis since the first emergence of the fungus in 1976. Making their way down south from Central America, the plague emerged in Peru the middle of 2012. Once a plantation is hit by coffee rust, their plants need to be removed and new seeds need to be planted. The recovery of a plantation takes up to three years. While now more resistant plants have been cultivated, it still continues to affect some of the farmers. A second remark that needs to be made is that it is extremely difficult to generalize findings for producers with different distances to the next urban agglomeration. While the producer of the village of La Florida count with good road conditions and only 1,5 h distance to the city of La Merced, producers from remote annexes encounter difficulties with some of them living up to 4 h from the city. Distance and remoteness is a crucial factor in the Peruvian Central Amazon that strongly determines sustainable livelihood of coffee producers.

Income

The income of farmers included in the study has declined substantially within the last five years. This has been majorly caused by three phenomena, which more or less emerged at the same time:

- The emergence of coffee rust and the consequent loss in income and uptake of credits.
- Rapid changes in the global coffee market: The paradox of demand for higher quality while there is a general decline in world market prices for coffee.
- Bad administration practices / management of the cooperative including a payment penalty and decertification in 2013.

In 2011, before the outbreak of the plague, FT farmers received up to 13-15 Soles for one kg of parchment coffee with good quality standards (80 points or more¹⁸). With 3 ha or more, the producer could count with sufficient income to cover all basic necessities. The coffee rust appeared overnight and farmers could watch how one plant after another was affected. As confirmed by different FGDs, up to 80% of plantations were lost, depending on the type of coffee producers were cultivating: *“In 2012 a member produced 135 quintals and the same one only entered 15 quintals in 2014.”* (KII_coffee, FT). Until today, only 50% of the plantations are restored. In order to survive this income shock and start restoring their plantations, FT farmers pursued credits by the Peruvian state-subsidized agriculture bank *Agrobanco*. Consequently, 80-90% of FT farmers are now in debt, and are obliged to pay back their loans after this year’s harvest.

The shock caused by coffee rust, was accompanied by other misfortune circumstances. According to both producers and staff of the FT cooperative, in 2012 the management at that time caused tremendous financial difficulties due to *“bad practices, loose coordination with farmers and selfish behavior.”* (KII_coffee_FT). Indeed, the cooperative had taken on a huge contract by the world’s

¹⁸ This refers to the coffee quality rating process, which is conducted by trained coffee tasters. 83 points or more are considered special quality coffees and are pursued by most cooperatives as they yield a higher price.

leading coffee chain with harsh trading conditions, while the general liquidity of the cooperative was in poor state. When the coffee crises began, the cooperative was not able to pay the producers on the spot and delayed payments for up to three months (a practice that is still happening). The producer, being in despair to survive and to pay their workers during the harvest, started selling increasingly in the streets to obtain liquidity. Consequently, the cooperative could not come up to the contract amount and received a penalty of 1,000,000 Soles (approx. 250,000 €), which has been causing huge problems for the cooperative until today. While the detailed circumstances would have required interviews with the former management, it remains clear that not only the producers, but also the cooperative is in a situation of sincere debt. Currently, 50% of the FT premium is used to repay these liabilities according to the FT cooperative management¹⁹.

Further evidence for internal problems is that, for the first time, the FT cooperative was decertified by FLOCERT for six months in 2013. According to the management, main issues centered around insufficient communication with and participation of members. This phase of decertification deepened the difficult situation of the cooperative as no new FT contracts could be signed during that time. Furthermore, the behavior of the management caused mistrust among the members and various producers left the organization: While the cooperative was composed of 830 members in 2016, today only about 700 members are forming part of it. The majority, especially the founding members, however, show still loyalty towards ‘their’ cooperative and resigned farmers are slowly joining again. The current administration attempts to regain confidence and openly discusses and approves the payment of the debt within the general assembly.

Price building of coffee is a very complex issue and determined by three major factors: (1) the actual state of coffee handed in, distinguishing between raw coffee, parchment coffee and green coffee, (2) the yield per quintal in %, extracting leaves, water etc., (2) the quality level given in points and determined by coffee testers. The minimum price of FT²⁰ is 9.75 Soles per kg green coffee, which resembles approximately 7.5 Soles for parchment coffee. At the moment, the coffee prices have decreased to an extent that the FT minimum price is applied for farmers in the region.

At the moment, part of the FT premium is used to improve on the price, which is allowed as per current FT standards, but internally discussed in the currently ongoing SPO review. The premium is fixed for one quintal of green coffee at 20 US Dollars. Doing the calculus for one kg and converting it from green coffee to parchment coffee, leaves a FT premium of 1.07 Peruvian Soles per kg parchment coffee. Currently, 25% of the FT premium are used to improve on the coffee price, leading to a final, on average, price of 7.77 Peruvian soles/ kg parchment coffee in the harvest of 2017. FT in the field confirmed that the price received for one kg of parchment coffee of sufficient quality was approximately between 7.5 and 7.8 Soles per kilo in the harvest of 2017, which is half the price of 2011 where farmers received approximately 15 Soles per kilo. For lower quality, prices are between 5-6 Soles per kg. Still producer have not always received 7.77 Soles/kg in the last years due to varied reasons. There are many producers who do not reach the required yield per quintal or quality levels. Also, coffee buyers, apparently, often order combinations in coffee – e.g. one part with the FT certification and one without – and offer bonded prices, lowering the average price of coffee for the cooperative and, hence, for the individual farmer. This procedure is not illegal but considered an

¹⁹ A recent extraordinary assembly decided to lower this share to 25% of the premium.

²⁰ The minimum price for coffee is globally fixed at 1.4 \$ for a pound of green coffee of high quality.

unfair trading practice. Moreover, due to the weak financial state of the cooperative, the institution was forced to discount their farmers for input costs, such as fertilizers.

This general sharp decline in price was not only caused by the coffee plague or bad administration, it is also a result of rapid changes in the world market. While in the Peruvian Central Amazonas counts with traditional coffee production, with low technological inputs, a rise in coffee *fincas* could be observed in countries like Colombia and Brazil. These commercial plantations show higher efficiency and larger resistance towards plagues. With a world market demanding better quality at lower prices, the Peruvian coffee sector is slowly losing its competitive advantage turning it more and more in a non-profitable business for small-scale farmers.

Non-FT cooperatives were not yet strong enough to identify clients in the times of crisis and still had to sell their coffee to intermediaries. They experienced the same shock in price and have been exposed to even greater exploitation when selling in the street. For one kg of coffee they received usually between 5 and 7 Soles, but sometimes the price exceeded the one of the FT cooperatives rising above 8 Soles. In addition, they reported of robberies of coffee, fraud in weighing, and random price fluctuations. In the most remote village of a non-FT cooperative, 15 to 20 farmers, resembling around 30% of coffee farmers of the village, had left their homes and coffee production due to the bad income situation and took on low income jobs in more urbanized regions.

Yet, farmers who sell to emerging private player sometimes count with higher prices than the FT one and have been paid on the spot, making it an attractive alternative even for FT farmers. Indeed, many FT farmers, in times of crisis, sold their produce to another company or in the street, thus impeding the FT cooperative to reach its production goals and comply with the contract.

A second phenomenon, which caused attention in the Peruvian cocoa context²¹, and has now also been observed in coffee by CLAC and other stakeholders, is the emergence of so-called ‘ghost-cooperatives’. Local companies have been setting up their own certified cooperatives, to leverage on the benefits brought by VSS, while power still being in the hands of the corporate management. It was revealed that supposed members on lists shared by these cooperatives were non-existent and instead coffee was bought from conventional farmers in the street. While this development causes high concerns and could jeopardize the credibility of FT cooperatives in the region, further evidence could not be revealed, as it was not part of this data collection to also approach private coffee companies in the region and inquire about their practices but would be urgently required.

Lastly, it was identified, that some independent farmers, who are not members of the FT cooperative, nevertheless sell their produce to a family member, who is FT member, to avoid selling in the street, hence indirectly benefit from the established FT system. This behavior must be examined in more detail to identify whether coffee passed on by family members is sold under FT (which would not be in line with standards and rules set) or only sold as conventional coffee to the cooperative.

²¹ In 2017, a 1000-member cocoa cooperative was accused of being a ‘ghost cooperative’ and de-certified. For more information, see [here](#).

Diversification

The main product in the area has always been coffee, as in earlier times it yielded high returns and enabled good conditions of living. According to the FT cooperative, coffee production comprises 80% of farmer's income among their members. The coffee rust crisis revealed that a diversification of different coffee crops is of utmost importance. Some farmers, who only planted one type of coffee plant, which was non-resistant to the plague, leading to the total loss in plants, are now realizing the importance to diversify their plants and hence being more resistant in the future.

Some more agricultural products have been traditionally planted, such as avocado, yuca or banana, depending on the altitude of plantations, which determines crop conditions. These, however, before and during the plague, have served only for their own consumption. Furthermore, animal husbandry has been existing to a small extent with many families possessing chickens, turkeys or guinea pigs. For families who encounter themselves in a situation of poverty, these yields of fruit, vegetables and meat are of tremendous importance to ensure sufficient alimentation all year long. Very recently, and as a reaction of the coffee crisis at hand, farmers increasingly start to diversify their plantations and plant and sell banana as supplementing income. Yet, selling banana in the province of *Chanchamayo* is still only possible to the national market, where profits are also marginal. Non-FT farmers have received a training by the state on the diversification of income, while FT farmers were not included in the same. Some non-FT farmers indicated that when they were young and did not have land, they used to work for other producers, but when they acquired their own land they mostly stopped this practice. Nowadays, due to the severe coffee crisis, they have started to work again for others as a strategy to compensate the low income that coffee gives.

Information

The price building is a complicated case in the regional coffee sector, as it depends first and foremost on the quality of coffee, which cannot be assessed by the producers themselves. Furthermore, there are differences in price for coffee berry and processed parchment or green coffee. Then, discounts in price are made for transport costs and input usage. As mentioned above, some coffee importers ask for combinations of FT and non-FT coffee, complicating pricing and liquidity further for the cooperative's administration as well as for the producers. Lastly, FT producers of the cooperative are not paid by the cooperative on the spot, but with a delay of up to three months. This causes difficulties, as farmers require liquidity to pay off workers during the harvest season. Considering these varied factors, many coffee farmers, especially women, don't feel informed well about prices and payment procedures, despite information sharing and approval of decisions in the general assembly. On a positive note, trainings seem to be fruitful. According to the FT management, most producers are aware of the main factors that enable receiving better prices.

The majority of farmers in the main village of La Florida are aware of FT and its principles of minimum price and premium, however gaps in information are still prevalent, above all, when it comes to the investments made by the premium. Many FT farmers could not recall how the premium is used, but only mentioned that in earlier times there were more investments. As of now, the cooperatives have autonomy in deciding on premium-investments but require approval in the general assembly²². It was further found that, especially female producers of remote villages are not

²² At the moment, a review of the SPO standard is conducted and the possibility to implement tighter guidelines and control on premium spending is discussed.

aware about the premium and its potential for social investments in the region at all. This raises questions regarding participation in general assemblies: While they are obliged to attend the assemblies, it appears as if a substantial share of farmers – be it due to their low education or due lack of information sharing – do not understand well the issues discussed.

This passive attendance and lack of understanding of essential processes of the cooperative has further implications. Despite being sensitized that it's important for farmers to sell their coffee harvest to the FT cooperative itself, many associates decide or are forced to sell some of their produce on the spot to a third party, especially when the latter offer higher prices. When doing so, they jeopardize the cooperative in fulfilling their production commitments, which then further weakens the institution:

“Producers are trained in these issues, but sometimes the price on the street is a tremendous competition. The producer is concerned about covering costs for their family. Sometimes the producer sells his coffee at 8 soles in the street, but the cooperative gives him 7.50 soles. It is a differential gain for them, so sometimes pitifully, they do not sell all the coffee to the cooperative.” (KII, Technical Staff, FT)

The non-FT farmers that were visited in the region could recall the prices paid last harvest, but factors that influence the final price given in the street remained unclear. While everyone was anxious about the low prices, they could not explain the reasons behind. Thus, they are totally dependent on the daily prices offered by intermediaries or companies.

Credit and Financial Services

Both FT and non-FT farmers received credit support by the Peruvian agriculture bank *Agrobanco*. The FT cooperative, apparently, facilitated this process by providing documents of farmers, but it remains disputed if they acted as collateral for them. *Agrobanco* besides its regular offer of credits to farmers, promoted a national program for renewal of coffee plantations, as a response to the coffee rust, giving out credits at a 5% annual interest rate (which is quite low for the Peruvian context). These credits served to purchase new, more resistant seeds and organic fertilizer to ensure growth of the new coffee plants. Regarding production costs, it is important for producers to have money at hand for providing optimum (organic) fertilization to their crops. This will increase overall yield and profitability, which hence again can cover costs of fertilizers. Besides, investment in better coffee quality, with better selection processes in the field and in the final process, can help to achieve better prices in the end. Yet, with no financial means or other securities or collaterals at hand, these benefits cannot be explored. The pay-back of credits will start from the 2018's harvest on. All farmers are exposed to the risk of land being taken in case they do not pay back their loans. This risk is quite high since the loan amount received just allowed producers to recover parts of their lands from coffee rust. Currently, they are still producing just a fraction of their actual production capacity. Additionally, they faced low prices in the 2017 campaign, which is likely to happen again in 2018. In this context of low production and low prices, especially non-FT producers have started to stop paying their loans out of despair, which is a trend that could likely continue and even rise in the next months. It was reported by the FT cooperative management, that many independent farmers took on loans, but did not invest in their plantations but spend it elsewhere. Hence, they are now not able to pay back with coffee production, which puts pressure on the state subsidized bank and might

likely cause a fall out of the institution. This misbehavior, according to the FT management, did not occur with FT farmers.

As mentioned in the 2011/12 CEval report, the FT cooperative has its own credit institution – *CrediFlorida*, which in the last years followed a quite independent pathway. For this reason, in the time of crisis the bank did not give out loans to their members and their interest rates are substantially higher than the ones of the subsidized state bank. Still, in case they do want to opt for a credit, members of the cooperative receive better conditions than non-members. It was mentioned once, that FT farmers asked their cooperative directly for credits to rehabilitate their plantations in the last assembly, but outcomes remain unclear.

Vulnerability

Considering the findings above, the vulnerability of FT coffee producers of PO#3a has to be ranked as very high. In this specific case, too many negative developments happened at the same time, making it impossible for the FT cooperative to support their producers in their precarious situation. Several factors contributed to high vulnerability of farmers:

Firstly, as mentioned, the rust coffee destroyed a big part of the plantations of farmers, resulting in 50%-80% of plantation losses. *Agrobanco*, the national agriculture bank, gave them loans for renewal of plantations, but the amount provided was not sufficient to recover the entire plantation. Thus, the production decreased, and with low prices, the farmers' profit was heavily reduced. With this low profit, farmers are now facing problems to pay back loans with the risk of losing their lands.

Secondly, mismanagement, the plague and its aftermath caused that the cooperative did not have enough quantity of sales and profits, triggering an internal financial crisis. This financial situation of the cooperative reduced its working capital and did not allow them to pay immediately to their farmers for their product. As a consequence, farmers in a desperate situation, who needed to pay their temporary workers as well, had to sell their product to other buyers and the cooperative had to break a contract that caused a penalty for the SPO. The debt situation paralyzed the cooperative and did not allow to invest in either new infrastructure projects, disaster resilience measures or other important inputs (e.g. organic fertilizers).

Consequently, with a big debt and low profitability, also the farmers had no money to invest in fertilizers and other supplies for their production. Besides, they were not able to qualify for more loans in other banks (they were over-indebted). Therefore, they had low production in the next campaign and low income again. Eventually, the economy of the region, in both villages and middle cities, was affected by this situation since coffee is of the main income sources of the region. While the FT cooperative survived and still counts with 700 members, other cooperatives had been dissolved with their members either now being independent sellers in the street or fleeing to urban centers to look for low-quality jobs. According to the FT management, some cooperatives are now coming back to life, thanks to the governmental *Plan de Renovación* to support coffee farmers.

One more factor needs to be assessed in more detail: Vulnerability is strongly correlated with the distance to the city, i.e. the collector plants, and the availability of roads. The producers have to organize and pay for their own transport – a substantial cost for the ones that live up to four hours away from the next collector plant. Distance as such is a crucial for many factors determining conditions of vulnerability and poverty in the Peruvian Central Amazonas. In remote villages or

annexes, not only incomes, but also infrastructure, state or NGO support, and education levels are substantially lower, exposing the inhabitants to the risks of extreme poverty. In remote villages, basic facets of poverty were recognized, such as the use of silo toilets with feces going into the soil and nearby river, wood stoves within the house causing respiratory diseases, absence of drinking water, animals living in the house without separate environments and schools being closed due to lack of children. For single FT farmers living very far from the village 'La Florida' and/or La Merced, the cooperative does not yield as many benefits as for the ones living closer and their vulnerability is substantially higher.

Differentiation

The FT cooperative subject to take part in this study has several organic certifications as 28% of the production adheres to the organic standard. They are able to sell to the North-American coffee market (USA and Canada) and already have the JAS certification for the Japanese market but have not started selling there yet. In Europe, they have several private certifications, such as *BioSwiss* and Bird friendly, and also count with UTZ, attempting to cater to a broad range of markets. Currently, they are applying for C.A.F.E. Practices, to which Starbucks adheres to. The FT cooperative has been certified under FT since 1998. The only time they were decertified was in 2013 for a duration of six months, which severely affected the cooperatives, as they could not engage in new contracts until the suspension was lifted. According to a representative from CLAC, one part is to achieve and maintain certification, but a second part is to actually find clients and markets, who demand FT or other certified coffee. This represents the most challenging part for most cooperatives.

Thus, the cooperative currently attempts to achieve further differentiation through a higher variety in quality Arabica coffee (namely *Caturra*, *Patuay*, *Gueisha*), which they harvest separately to achieve higher prices for the same. To approach the niche market of special coffee, the cooperative now counts a coffee taster on-site, who enables the quality assessment of coffee berries and beans. Usually, coffee importers abroad have their own coffee-taster, making it up to them, which quality rating is given, and often sending back a part of the production due to insufficient quality. The FT cooperative now advanced in this respect, by pre-testing quality and only sending in batches of coffee that align with the client's requirements. According to the FT management, in the last five years, clients' requests have changed substantially, as they have become more exigent for the best quality in coffee, while in former times rather volume and purity of beans were determining factors. This strong shift is not easy to cater to, but the FT cooperatives determinedly adopted a new strategy to be competitive in the future. Lastly, they are now also targeting the national coffee market and have released their own packaged and branded coffee to be sold in the capital of Lima and other higher-income regions.

Non-FT cooperatives visited in this study did not count any certification but attempted to achieve the organic one with the help of the government, as only then, better markets could be approached. They were less informed about measures to improve their quality and had to trust intermediaries who determined their prices.

Infrastructure

As mentioned above, distance is a crucial variable that does not only influence coffee price, but also farmers' livelihood and infrastructure available. In the FT cooperative examined in this study, it can be said that a very centralized approach is followed with the majority of premium investments in

infrastructure taking place in either the city of La Merced or the main village of La Florida. Two impressive processing plants have been established with the aim to be more independent from external service providers when drying and processing coffee. However, more investment is needed to obtain complete charge of the process and thus reduce costs in the long-term. While a few farmers in remote villages have their own infrastructure to turn coffee berries in parchment coffee, the majority depends on transport services to take their berries to the two centralized plants. This is a challenging task, not only because processing needs to be done within a day of harvesting and streets are in bad state, but also considering that for one kg of parchment coffee, 5 kg of coffee berries are needed. This means that five times the weight has to be transported – a substantial cost for many farmers. Conclusively, many farmers in remote regions, despite being part of a cooperative, prefer to sell their coffee to intermediaries who reach their villages with small trucks and pay them directly. Those farmers neither benefit from the FT price, nor from any infrastructure investments financed by the premium, but are still exposed to exploitation and instability of informal trading. In the years of the crisis, considering that 50% of the premium was used to pay back debt, no additional infrastructure investments in the communities were possible – a result which caused substantial dissatisfaction among FT farmers.

Non-FT cooperatives also require investment in building up their organization and taking charge over coffee processing. The non-FT ones that were visited have received governmental support but require additional resources to co-finance larger investments. As the government project is ending in 2019, these organizations experience substantial time pressure to realize their outputs planned. No NGOs or international organizations could be identified who provided support to coffee farmers in the villages visited.

4.1.4. Cotton Case Study

General Remarks

Three general remarks need to be made before discussing findings of the cotton case study. Firstly, it needs to be mentioned that time constraints as well as language issues²³ impeded the research team to retrieve more profound information for some research areas. Secondly, on a very different note, the FT CPO visited encounters itself at a crucial point in time, as the transition into a FT SPO is scheduled for this year. Thirdly, the FT CPO counts with both organic and FT certification and thus operates in a niche market considering that organic cotton only represents a share of 0.5% of the global cotton market. Findings in the economic dimension are presented in the following:

Income

The CPO visited for the cotton field study works with smallholder farmers only. This means that cotton farmers producing for the CPO do not cultivate more than four acres. Main sources of income are (cotton) farming and livestock. According to management interviews the average farm size is two acres. As the producer organization is not only FT-certified since 2008 but has been set up around organic farming practices from the beginning, all farmers selling to the producer organization adhere to organic farming techniques. This in turn has some influence on the yields and also the prices they

²³ Farmers, management representatives as well as field staff did not speak English, but only Gujarati (the local language prevalent in rural Gujarat) and Hindi, making the German research consultant adopting a rather passive role during the data collection. All interviews were conducted and transcribed in Gujarati and later translated to English.

can acquire. While the yield per acre of organically farmed land realizes on average eight quintiles, conventional farming was reported to yield on average nine quintiles. On the other hand, organically produced cotton is valued through a higher market price. Apparently, cotton farmers producing for the CPO reported receiving a farm-gate price 20 to 50 INR higher than the conventional market prices, which comprises both the higher price paid for organic products and an additional 4,5 INR the CPO adds per kg of seedless cotton. Consequently, a FT cotton farmer will receive approximately 15.000 to 20.000 INR per acre or 1070 INR per 20 kg of seed cotton. Higher labor costs for organic farming are, however, not taken into account by the farmers. Net household incomes of FT cotton farmers benefit especially from agricultural inputs provided by the CPO, such as organic fertilizers and seeds, which are also hard to come by on the general public market. Furthermore, expenses for transportation are reduced, as purchasing clerks of the CPO buy the cotton at the farmers' doorstep to maintain the purity of the organic cotton and ensure strict separation to conventional cotton. Non-FT cotton farmers on the other hand report hiring private vehicles and travelling from the village to another market to sell their cotton:

“We travel a distance of 30 kms away from this village to sell cotton in a market. We mostly hire private vehicles to travel till the market.” (Male farmer, non-FT, FGD_11)

This is also reflected in discussions on the major income expenditures, where next to education, health and social expenses (marriage, funeral) non-FT farmers mentioned especially agricultural inputs (seed, fertilizer) but also fuel expenses as further items of expenditure. In interviews with CPO management the reduction in production costs for FT affiliated cotton farmers is hence estimated between 4000 and 6000 INR per acre/year. Besides economic benefits the set-up of the FT CPO also allows farmers to be more independent from multi-national agriculture companies, which is certainly an important factor for greater empowerment.

Summarizing, annual household incomes of FT cotton farmers varied between 30,000 and 150,000 INR, while farmers of the comparison group reported incomes between 25,000 and 100,000 INR. In addition, the CPO has turned towards disbursing farmers by transferring the money to their bank accounts instead of paying them cash. As a consequence, FT farmers and management report an increase in savings among FT cotton farmers – though on a moderate level – as money cannot be accessed and spent so easily. This practice, triggered by the government, was introduced approximately two years ago.

Diversification

In both the FT and non-FT villages visited during the field study, the main income source for the majority of farmers was cotton. Nevertheless, farmers also engage in other agricultural and livestock activities to supplement and diversify their income. Knowing about the unpredictability of rainfalls and the vulnerability of cotton production to sufficient irrigation, farmers also produce other crops such as jeera (cumin seed), bajra (millet), groundnuts, wheat, chickpeas, lentils or vegetables. Most of additional crops cultivated, however, serve for subsistence purposes to ensure daily food requirements of the family. According to interviews with CPO management, farmers are around 50% self-sufficient with their produce. Farmers usually also have one to two cows, whose by-products (e.g. milk) are often sold on the market. In terms of other non-farming related income activities, the most frequently named were teaching, working as policemen or in small self-businesses. Alternative employment opportunities (e.g. labourer in windmills and other construction sites) are scarce in this

region. Moreover, farmers prefer to earn their income from cotton farming compared to other forms of manual labour as the average income is about the same, but work in construction sites or other forms of manual labour is regarded as much more strenuous and insecure. As women (as well as some men) in some of the villages studied are well-known for their craft-making skills, they engage in production of *bangles* (bracelets) as alternative income source.

Information

Interviews with CPO management suggested that cotton farmers associated with the organization know the price for cotton they get and they know about the existence of the premium. The Producer Executive Body (PEB), more specifically was said to know how exactly the premium comes into existence. In discussions with the FT farmers however it appeared that decisions on pricing and the premium were not thoroughly transparent to all farmers. This was even more noticeable in FGDs with women. In some FT villages female cotton farmers did not know about certifications, however, mainly those were wives of cotton farmers, who supported farming activities, but had still limited decision-making responsibilities. Asked about pricing, female cotton farmers in one village agreed:

“No, we do not know how to decide price, because our men go out selling the produce outside the home.” (Female participants, FT, FGD_8)

The quote above emphasizes the general gender imbalance prevalent in this specific context, but also shows that FT in this setting has not yet achieved to overcome traditional role perceptions and support women empowerment.

Nevertheless, all FT farmers generally agree that they get a better price with the CPO than on the market. Differences between 20 and 50 INR per 20 kg were reported. In one male FGD, participants understood that prices can vary depending on the quality of cotton offered to the purchasing agents of the CPO. Knowledge about world market prices was, however, not mentioned. CPO management summarized that affiliated FT cotton farmers received 1070 INR per 20 kg seed cotton instead of an average 1000 INR on the conventional market. In addition, 4.5 INR premium per kg of seedless cotton are paid (approximating an additional 27 INR per 20 kg seed cotton). Some male farmers were well aware that information on prices was nowadays distributed via mobile phones and sometimes during trainings. Again, a gender imbalance regarding information sharing could be observed, as the following statement illustrates:

“Meetings with the CPO are generally attended by men because women don’t know. They arrange meetings for men and provide valuable information on farming in those meetings. Women don’t know much about that because meetings are attended by men. But yes, we know that farming is improved after the CPO has involved. They even provide enhanced profit. (female participant, FT, FGD_2)

For cotton farmers in the control villages the process of negotiating prices seemed to be less obscure: To sell their produce, cotton would be taken to the market, piled up and examined by different traders. Ultimately, they would sell to the broker offering the best price. On the other hand, it was clear that non-FT (and non-organic) cotton farmers received lower prices for their yield. One leader in a control village mentioned prices as low as 700-900 INR per 20kg.

Credit and Financial Services

As the CPO has taken to the practice of disbursing affiliated cotton farmers through their bank accounts, the number of farmers with bank accounts has risen tremendously. While before this practice only about 25% of cotton farmers had bank accounts, nowadays all cotton farmers selling to the CPO have bank accounts. While this rise was also observed for male non-FT cotton farmers, a gender difference could be observed here, as women usually do not have access to financial services. The bank account rise is also attributed to the Government schemes promoting financial inclusion and digitizing banking systems. Only a minority of FT cotton farmers has taken loans (e.g. from the government for education of children). In terms of credit history, a difference between FT and non-FT cotton farmers can be observed, which can be traced back to the provision of farm inputs such as seeds and fertilizers: While FT farmers are provided such agricultural inputs, non-FT farmers have to acquire them with their own money. Illustrating this, male farmers in one comparison village stated that as much as 90% of people avail themselves of crop loans. Per loan of 100,000 INR, repayment was said to be as much as 12,000 INR per year. Such loans are however usually attached to their (agricultural) insurance, with notable consequences in terms of deductions from the crop insurance:

“If crop loan is taken from a bank, they give it by deducting insurance amount and the insurance never attains maturity.” (CI, Sarpanch, FT)

Vulnerability

All the villages studied, both FT and non-FT, are heavily dependent on agriculture as their main source of income. Moreover, due to the dry region they are based in, cotton farmers are extremely dependent on rains. Scarcity of water is seen as main hindrance to “good, site-specific agriculture” and, ultimately, is the major influencing factor determining their vulnerability. Farmers report a direct connection between good rainfalls and an increase in incomes. Against this background, the CPO visited for this study has initiated a drip irrigation project to tackle this problem in cooperation with the government. The project is supposed to be expanded in 2018. Currently, only 2% of farmers have irrigated land (mostly from boreholes) while the rest depend on natural rainfalls, making them extremely prone to changes in climate pattern.

The practice of taking agricultural insurance is rarely followed. The only insurance some of the farmers take up is one provided by the government (so called *Dhiraan*). Unfortunately, however, cotton farmers state that in times of need they do not receive any compensation from the government and the CPO does not help either. Regarding this, in one comparison village interview the view was expressed that the institute or government issuing the agricultural insurance should step up efforts in giving information and making people aware about the terms and procedures of the insurance so that farmers can fully understand the process.

As cotton production is generally the main source of income, in times of drought, farmers face big cuts in their available household income. This situation is even more aggravated for non-FT farmers, which in contrast to FT cotton producers, have to purchase all agricultural inputs such as seeds and fertilizer on their own. If there occurs a drought, non-FT cotton farmers have wasted their entire money on seeds. Farmers producing for the FT certified CPO, at least, do not face this additional risk, as inputs are provided.

Differentiation

The CPO visited for this case study has been set up around organic standards and hence been certified organic since its inception in 2003. Thereby it adheres to organic standards of the European, Indian and US-American market. Five years later, in 2008, FT certification was obtained, complementing the initial primarily environmental focus with further social emphasis. These roots in organic farming are not only emphasized in the CPO's external communication but also reflected in statements of cotton farmers or CPO management. Besides the higher market price organically produced cotton can achieve, FT certification adds an additional premium of 27 INR per 20 kg which benefits the farmers in terms of free farm inputs, infrastructure development and occasional trainings. Besides Fairtrade certification for cotton, the CPO visited for this field study is also Fairtrade certified for the following products: cane sugar, coffee, herbs, herbal teas and spices.

Infrastructure

Both FT and non-FT cotton farmers reported considerable improvements in terms of infrastructure development, especially with regard to drinking water and electricity supply. Electricity supply was said to be available without limitation for the majority of cotton farmers. These developments can be attributed primarily to government efforts, however, like for instance the supply of water from a nearby river. Less improvement has been seen in the fields of road networks and sanitation. The percentage of households with access to toilet facilities varies between 10 to 20% within and between the treatment and comparison villages. Furthermore, it is worth mentioning that the infrastructure situation regarding information and communication technology is currently considered unsatisfactory, as neither mobile nor internet access is provided.

Regarding infrastructure development facilitated by the CPO and more specifically the FT premium, efforts with respect to reliable irrigation have to be emphasized. Currently, there is a drip irrigation project being spearheaded as public private partnership (PPP) project between the CPO and the government. Thereby a subsidy of 70% is provided by the government, while the CPO supplies 30%. This resource-efficient irrigation technology will be made available to the farmers this year (2018). Previous efforts in the field of drip irrigation by Aga Khan Foundation some years ago had not been successful and hence were abandoned. As often knowledge on such government support is not available and a lack of capacity of farmers for undergo bureaucratic processes further impedes their accessibility, the CPO in this case helps cotton farmers get access to those schemes.

“The CPO is working to get the facility of drip irrigation for our farmers to help them improve their produce. The government has already provided the subsidy; the remaining amount will be by the CPO to the farmers who work for them.” (KII, Assistant Farm Manager, FT)

In addition, several small-scale projects, often also in the field of water supply, have been facilitated by the CPO: FT cotton farmers mentioned the drilling of water boreholes, provision of water tanks as well as reverse osmosis for safe drinking water at a local school, pond construction and deepening as well as maintenance of watering places for cattle. Finally, in one village the building of a cemetery and a thatch of palm leaves were mentioned. Interviews with CPO management gave further insight into the usage of the FT premium: 28% of the premium money go to GMO-free seeds, 5.5% go into administration and the rest of the premium is invested in development projects like the aforementioned.

4.1.5. Flowers Case Study

The following two preliminary remarks must be made: Firstly, the comparison farm is known for its social responsibility towards its worker, which is why they probably agreed to be part of the study. The non-FT farm, thus, might not be representative to the average flower farm within the region. To nevertheless retrieve information on the situation at other non-FT flower farms, specific questions were included in the questionnaires. Secondly, during the point of data collection Kenya was weakened by political turmoil and postponed elections, which might have caused additional insecurities among workers and management included in the study. In the following section, findings on the flower case in the economic dimension are shared.

Income

The applicable national minimum wage is around 5,000 KES but the level of salaries at PO#5a is specified by the CBA, which is negotiated by the trade unions. In regards to wages, PO#5a differentiates between skilled and un-skilled workers. Currently, the starting salary for an un-skilled worker is 6,048 KES with deductions for social contributions (500 KES for health and 200 KES for pensions). Lunch is provided at a subsidized rate of 15 KES per plate and covered by the FT premium. Further benefits include a daily transport allowance of 75 KES per month, a housing allowance of 2,400 KES per month, and an annual leave travel allowance of 2,500 KES. There are salary increases after every two years and ongoing negotiations aim at a salary increment of 10%.

Adding up salaries and allowances leads to an average wage that is still below the recommended Global Living Wage²⁴ for the horticultural sector in rural Kenya, but has, at least, improved over the last years. The farm management was aware of the discussions surrounding the Global Living Wage²⁵ but considered the recommended level as too high, since this would not enable them to continue their operations, especially with the increased competition with Ethiopian Flower Farms.

Indeed, Ethiopia was causing a lot of competition for Kenyan Fairtrade Flowers due to lower production costs resulting in a strong price pressure. They would prefer a raise of the national minimum wage. Workers reported that with the increasing presence of the union over the past years²⁶, wages had improved a lot and they were now paid timelier than before. Despite the increase of wages over the past years, workers still attest that income is not enough to meet their daily living expenses (see vulnerability).

Married workers with a double income were able to save a certain share of their income (around 1,000 KES) to spend on their children's future education or to buy some land, a house or to start-up a business like Boda-Boda (motorbike taxi). By contrast, single parents were almost never able to save some money for future expenses.

The income situation at the non-FT farm is comparable to the FT-farm and also depends on the CBA. Entry salaries also amounted to 6,048 KES for unskilled workers. The salary is reviewed annually and commensurate with experience. Salaries are transferred to their bank accounts. Additional allowances are paid for housing, spraying, and for applying chemicals and are slightly less than at the

²⁴ FT is one of the key actors to support the [Global Living Wage Coalition](#).

²⁵ The most recent Global Living Wage Report for Kenya in the horticulture industry can be found [here](#).

²⁶ Since 2014 the FT HL-Standard guarantees freedom of association and the right to union activities.

FT farm (e.g. a housing allowance of 2,240 KES instead of 2,400 KES). Food is also subsidized by the company with a contribution of workers amounting to 370 KES per months. While lunch at the FT-farm is subsidized by the Fairtrade Premium, the non-FT farm subsidizes the lunch through its regular farm income. Workers at the non-FT farm reported that their income situation had improved despite external economic pressure. This was also related to the fact that they know have a transport system which brings workers to their work place and that many of the interviewed workers had previously been employed as seasonal labour but had managed to get a permanent contract. Still, many workers were not able to meet all their monthly expenses and some of them had taken loans from their circle frequently.

Diversification

Because in many instances the wage paid at the FT farm is not sufficient to meet all monthly expenses, many workers revealed that they had businesses on the side to make an extra income. Workers estimated that 80% of them have side businesses. Common businesses are selling roasted maize, vegetables or charcoal. Most sprayers also owned a motor-bike and would work as Boda-Boda drivers (motorbike taxis) after their reduced working hours of four hours a day. Some workers also own their small pieces of land where they grow maize, beans or tomatoes. They argued that livestock farming was too labour intensive and that they would not have enough time to keep animals. Workers also reported that the PEMA capacity building courses had enabled them to use their acquired skills as hairdressers, catering, and driving. Compared to the FT farm, fewer workers at the comparison farm mentioned that they had side businesses.

Information

Workers at PO#5a are quite informed about the Fairtrade system and the generation of the Fairtrade Premium and also displayed a good knowledge on exporting procedures of flowers. Many workers argued that the Fairtrade flower market should be increased so that they would receive a higher Fairtrade premium, which would make it easier to share it among workers and the community.

Not surprisingly, the farm management also wished that the Fairtrade market could be extended. They feel that they have to comply with more and more criteria (the compliance level of Fairtrade Hired Labour standards actually increases for six consecutive years) while they were selling at the same price as recently certified farms. They reported that the market situation had not been very favourable over the past years and the market share had not increased or even declined while their own production costs were increasing. Ethiopia was causing a lot of competition for Kenyan Fairtrade Flowers due to lower production costs resulting in a strong price pressure. Farm management argued that Fairtrade should do more in terms of connecting Kenyan Fairtrade Flowers with the markets providing examples such as promotion sales during excess times and that Fairtrade should advocate for higher market prices for Fairtrade Flowers in Europe. The management itself was aware that they should consider new business opportunities in order to stay competitive in the future and were discussing opportunities to diversify their products and to enter online or emerging markets.

Similar to the FT farm, the comparison farm only produces for the European market and there is no national demand for its products. While workers were aware of this basic fact, they were not very sure of what happens after the products leave the farm and how export markets work.

Credit and Financial services

At the FT farm there are two different credit schemes which generally grant workers a good access to credit and financial services. First, there is a loan scheme through PEMA financed by the Fairtrade Premium. The other institution is a credit circle scheme (SACCO) which had been initiated by the workers themselves. According to the accounts of circle representatives, the idea was not very welcomed initially but had gained increasing approval because it was run very well. Some workers are also members of circles outside. Furthermore, all workers have a bank account to which their salaries get transferred. A withdrawal costs 30 KES.

The conditions and loan schemes between PEMA and the circle do not vary very much and both institutions cooperate closely together. In order to be able to get a loan from the circle, workers need to be members and pay a monthly contribution of at least 600 KES. The circle is insured by an external insurance agency for bail-outs of its members. The maximum size of loans is 40,000 KES at PEMA and up to three times of someone's saving at the circle. PEMA has different loan schemes for constructing houses, buy land, and for education of the workers' children. The circle also offers emergency loans of up to 10,000 KES.

Most of the workers interviewed had received loans from one of the two institutions in the past. Workers provided examples for which they had typically used loans in the past which included the purchase of motorbikes, the construction of residential houses and the purchase of land, starting their own businesses, and for the education of their kids. Examples for the use of emergency loans included health emergencies of the workers themselves or their family members, other family related emergencies as well as jail bails. As workers hardly find themselves in a position to put aside money to save for the future, the saving and credit schemes at the FT farm are important institutions for granting workers access to financial and credit services. One risk that is related to the good accessibility to different credit schemes is the low financial literacy of some workers. Some representatives of the circle and PEMA reported that workers often managed their loans poorly or applied for too many loans which they could hardly pay back with their monthly salaries. At the time the field research took place, many workers were not able to get a loan because they still had ongoing loans with the circle.

Both workers of the treatment and comparison group were very proud about being able to maintain their own circles. According to their accounts, not many farms in the area had their own circles and most workers were members of external saving groups. Summarizing, access to financial and credit services at the FT farm have increased over the past years, as for instance the circle had not yet existed at the time of the 2011/12 study.

Workers at the non-FT farm have their own circle as well. More than 90% of workers are members in this circle and they contribute a minimum of 1.000 KES per month. Loans are taken from the circle to spend on school fees of workers' children but in many cases, workers also reported that they ask for loans to make their monthly living. This means that workers would acquire debts during mid-month and pay back their loans at the end of the month which means that they are not in a position to use their loans productively.

Vulnerability

At the time the Kenyan case study was undertaken, a prolonged drought had affected Kenya's agricultural sector and had driven up costs for food and fuelled inflation. Political and ethnical

tensions surrounding the 2017 presidential elections further contributed to price rises. By June 2017, the price of maize flour (*unga*) for ugali production, the most common staple food, had increased by over 30%, milk by over 10% and sugar over 20% due to supply shortages. Inflation reached a level of up to 12% in June 2017 but was on an upward trend towards the end of the year (The Guardian, 2017).

This situation was reflected in many FGDs where workers complained about the strong increase in food prices. Many workers explained that due to the current economic situation, the increase of salaries had been nullified and they found it harder to meet their daily needs than one or two years ago. Due to the drought, workers in possession of their own land had also stopped farming and were therefore foregoing extra income. Participants of the FT FGD reported that their basic income is consumed by expenses for rent, school fees, food, and clothing. According to accounts of FT and non-FT workers, houses around Juja were more expensive than in Thika (which has a closer distance to Nairobi). As household sizes of workers at the FT farm vary greatly (1-6), the ability to meet monthly expenses with the income of farm labour was highly dependent on the family background. While all workers, FT and non-FT, were covered by the national health insurance and a basic national pension scheme, these schemes do not cover dependant family members, which are left vulnerable towards health problems and social security.

The most vulnerable groups at both farms were women and seasonal workers. The large majority of mothers raised their children in the fathers' absence, so they bear the economic cost of catering for their children and paying the tuition fees for secondary school. Mothers with adolescent kids visiting secondary schools were thus struggling the most to make ends meet. They also had less time to engage in side businesses to top up their income. By contrast, single men were much more positive about their economic situation. Seasonal workers face a high uncertainty in terms of future income. In case of illness, they are not entitled to sick leave and it will also diminish their chances of getting a permanent contract.

Despite the named challenges, most FT flower workers had an optimistic outlook on the future. Due to their strong trust in the union, they were hopeful for further increases in wages and their housing and transport allowances. They also mentioned that they felt secure at the farm because their employment is relatively secure compared to many other people in the community and because they also have a social environment to which they have grown used to. Lastly, they value the support from the farm regarding difficult life situations especially when they face health problems. Access to credit schemes enables the workers to face economic hardships more easily as when they had to face them by merely relying on their income.

At the time field research for the last study was conducted, economic challenges were almost identical or even more severe compared to the economic situation described above. During the discussions, workers stated that the increase in wages and benefits over those years had not been sufficient to compensate for the inflation in food prices. However, a number of safeguards provided including social insurance, sick leave and maternity leave, a predictable income, subsidized education, food, and day care as well as access to financial services could lessen the effects that came with external (economic) shocks.

The resilience of workers at the non-FT farm is comparable with the situation of workers at the FT farm. Most of these workers' salaries were also consumed by rent, food, school fees and clothing but some expenses and especially rents in Juja were slightly higher than in Thika. Most workers were single parents feeding and educating several children with their small salaries. As their salary was already quite small under normal circumstances, they were equally struggling with the current economic situation. The inability to make ends meet meant that non-FT workers used loans to finance their daily expenses towards the end of the month, which implies an additional factor to increased vulnerability.

Differentiation

The farm visited during this field study has been FT certified since 2001 when it participated in a pilot project for the certification of FT roses run by Max Havelaar. Because the market of Fairtrade roses has been stagnating over the past years, competition between Kenyan Fairtrade flower farms is quite high, especially with more farms entering Fairtrade certification.

Up to this date, it is not possible to produce organic roses. Roses are very prone to fungus diseases and pests requiring the use of chemical fungicides and pesticides. However, the FT farm is also certified under the eco-label group Milieu Project Sierteelt (MPS) for sustainably produced plants. It has the status of an MPS, a grower which represents the most environmentally-friendly cultivation process. Furthermore, the farm also holds MPS SQ and MPS GAP (recently since 2017) certificates. While MPS SQ includes requirements regarding health, safety and terms of employment, MPS GAP requires safe, sustainably cultivated, high quality and easily traceable products.

The non-FT farm has been MPS-A certified since 2014 and later also received MPS GAP and MPS SQ certifications for a sustainable and socially responsible production of its horticulture products. Workers at other farms were not much aware of certification schemes of other farms. They had generally heard about one or two other Fairtrade farms in the region (even if there are much more) and did not know of any other certifications or standards, as they are less visible (e.g. in terms of packaging) than FT for both the end consumer and the producer.

Infrastructure

Physical infrastructure has rapidly improved in areas adjoining FT farms but there is still room for improvement. Many new roads have been built over the past years and they are generally in good conditions even though there are a few roads which are not accessible when it rains. Water for home use is quite scarce and there is a risk that it could be contaminated with bacterial disease vectors, which is why FT commissioned typhoid vaccination in the first place, though the vaccination program was terminated due to political interference. During the group discussions, workers attested that there are enough clinics in the region even though they do not always have enough drugs and personnel. The large majority of workers had access to electricity.

FT in particular has supported some activities in terms of infrastructure and community development, especially by building water sources in water-scarce communities. Besides, Fairtrade also engaged in the construction of a footbridge to cut the walking distance for its workers on their way to work, and the construction of a police post to address security issues in the region. However, compared to other activities of PEMA, infrastructure development did not seem to play a major role. Furthermore, by serving communities around Thika and Juja, the FT farm covers quite a wide area in which other Fairtrade farms are active as well. The large geographical area however reduces the

impact on community development through the Fairtrade premium. Besides, there are several other Fairtrade farms in the region (though less active) covering the same area.

The research team found very little evidence that other agricultural farms, except the FT flower farms, would support community development through CSR in the investigated region. Besides the increased role of private sector investments in infrastructure development, a number of development projects were also financed by the CDF, which has had a quite good track record in the region in terms of adhering to performance standards. Over the past few years infrastructure has developed quickly, especially in Juja where agricultural land is being transformed in urban space at a fast pace. While these developments have raised living standards in the region, this was also accompanied by rising prices and increasing land pressure.

Workers at the non-FT farm also assessed the general infrastructure situation in Juja as quite satisfying, especially in regard to water, electricity and roads. Two narrowly defined infrastructure projects in close proximity have been supported by the non-FT farm: firstly, the provisioning of clean water to the neighbouring community and, secondly, the upgrading of roads leading to the farm.

4.1.6. Tea Case Study

General Remarks

Three comments need to be made beforehand: Firstly, during the time of data collection in January 2018, the tea gardens were still recovering from a major strike that had lasted for 104 days between June and September 2017 and brought tea production almost to a standstill. Tea gardens that were in the midst of the second flush of the Darjeeling Tea had to close for the period of the strike and lost about 67% of their production (Ghosal, 2018). The strike was organized by a local party, the *Ghorka People's Liberation Front (Gorkha Janmukti Morcha - GJM)* demanding a separate state, *Ghorkaland*, for the region's majority of Nepali-speaking communities. Considering that many of the tea workers, who are mostly of Nepali descent, are part of the GJM affiliated unions, certain feelings of being put at disadvantage by the plantations and the West Bengal government were revealed during the discussions. Furthermore, for many of them, the promise of an independent Ghorkaland still resonates strongly with their demands for a minimum wage for tea garden workers, which has not been established up to now (Titash, 2017). Secondly, it needs to be reiterated that no comparison group could be included in the tea case. Thus, only findings of the FT target farm are reported and longitudinal comparisons are drawn. Thirdly, it is important to keep in mind that the proportion of FT tea is substantially low in the subject farm examined with only 4%, being sold under FT labeling, hampering a large-scale impact of the FT premium.

Income

All workers of tea gardens around Darjeeling receive a daily wage of 132.5 INR (equaling 1,65 €), which is comparably less than the national minimum wage in agriculture, which amounts to 350 INR/day. Wages for workers with a permanent contract²⁷, which applies to most workers, are paid year-round, thus workers also receive the same income during the rather unproductive months from November to February. Workers at PO#6 receive an additional incentive of 5 INR for every additional

²⁷ In the past, the tea gardens also hired seasonal labor during the harvests, however, due to the shortage of labor supply, as a direct consequence of the unfavorable employment terms and increasing job and education opportunities, seasonal labor has stopped.

kg exceeding the minimum requirement of plucked tea leaves per day. Salaries are paid bi-monthly. Furthermore, workers receive bonuses of between 5000 and 6000 INR, amounting to approximately 20% of their salaries, during the festive season in November. 12% of the worker's cash salary goes directly into a governmental provident fund, assuring retirement for tea workers. The company contributes the same amount to the fund. Besides the daily wage, workers receive further benefits including free housing, consisting of a bedroom, kitchen and toilet with free water supply, free medical benefits for all family members, subsidized food and rations of rice and flour. Furthermore, workers receive a lump sum of money to purchase blankets, shoes and work equipment including tea picker baskets and umbrellas. While this in-kind provision certainly yields benefits, the quality of housing or medical services and the money provided for equipment purchases²⁸ was often considered insufficient.

Most workers are married and both husband and wife are engaged in work to achieve a double income. If both spouses work in the tea garden, their household income is still considerably low, rendering it difficult to cater for additional costs such as school expenses. Families, where the husband could find a job outside of the tea garden (e.g. as carpenter, driver or army officer), are comparably better off, considering that common salaries are around 350 INR (4,37€) per day. Depending on additional income sources and the type of work that family members do, participants of the FGDs estimated their average household income at 8,000-15,000 INR (equaling 100 -190€) per month. As the salaries workers receive are considered to be quite low, participants of the FGD repeatedly mentioned the appreciation of the FT premium. FT standards for HL allow investing some of the FT premium in cash or in-kind benefits for their workers and, indeed, some of the investments made through the FT premium included the provision of LPG cooking gas, the distribution of energy saving LED light bulbs and heating machines. The premium is regarded as something that adds to their salaries, as have a positive impact on their income available.

Diversification

Due to the low wages they receive and rising costs of living in the region, workers are forced to engage in additional income-generating activities. Most workers also reported that they kept livestock, such as cows, pigs, goats, to top up their little salaries by selling milk and cow dung and many also grow their own vegetables in their gardens. According to a union representative, approximately one third of the households engage in animal husbandry and rear goats for sale. 15-20% of the households keep cows and make an additional income from selling milk. A FT premium financed cow project that had been initiated in 2010 and enabled the distribution of cows to workers via micro credits had been terminated, allegedly because of improper veterinary care. Other projects in the past included the distribution of sewing machines, pressure cookers, and blankets. Lastly, a tea tourism project initiated by the mother company also seeks to generate further income sources in the tea garden, while at the same time creating additional jobs in the gardens, which are not directly related to revenue generation through tea trade.

²⁸ For instance, workers get 60 INR per year for the tea picker basket but it costs 250 INR at present; they get 80 INR per year for shoes but the gumboots that they wear while working cost around 250 INR. They also get another 480 INR for cooking fuel expenses per year but they need to refill one cylinder for 1100 INR per month.

Information

Most workers at PO#6 were aware of the very basic idea of FT, elaborating that FT helps poor or vulnerable people working on tea farms. However, they displayed little knowledge on the generation of the FT premium money and the exporting procedures of tea.

Credit and Financial services

Workers have their own bank accounts but do barely use them because there are no banks or ATMs in walking distance and salaries are still handed out in cash. Most workers (except those who were promoted as supervisors) are not able to save some money for the future but around 40% of the workers now have a life insurance according to tea garden management. A few (female) workers have joined self-help saving groups, initiated by the government. Most of the male workers expressed that they had never taken a loan because they are not able to save the money to pay it back and fear to apply for it from the provident fund, as this would decrease their future retirement payments.

Vulnerability

The biggest risk tea workers are currently facing is the general rise in commodity prices, especially in terms of (healthy) food. Considering that the tea farms are located in quite remote areas, their population, in general, face higher prices than people living in urban agglomerations. Union representatives also confirmed that it was challenging for workers to meet daily expenses and to spend sufficient money on food, especially vegetables and oil. The social care system provided to tea workers still shows weaknesses to protect them in times of emergencies. Workers are relatively prone to income loss during sickness or injuries. They are entitled to 14 days of sickness but will not receive any further payments after this period. Workers also do not receive a medical or injury insurance and are thus not protected against prolonged incapacity to work due to severe injuries or sickness including accidents at work. In the case of a serious injury which prohibits a worker to continue his or her job, their family is supposed to pass on the job to another family member. Yet, a person who was replaced does not receive any benefits. Furthermore, there are no insurances against external shocks or disasters, such as landslides. However, compared to five years ago, more workers are now in possession of a life insurance (for more details see below) and all workers are covered by the national provident fund through which they save for their retirement. Another challenge that renders workers vulnerable is the fact that they cannot hold land titles. This also means that if one day the companies decide to let go of certain workers, they do not have any rights to stay in the region. To construct houses, members of the community need a No Objection Certificate (NOC) from the tea company management. While a NOC is needed for all infrastructure development activities in the gardens, getting such a certificate is especially difficult for people from the communities in the tea estates who are not working there. Since getting a NOC can be a tedious process, in many villages less infrastructure development is done compared to what they are entitled to by the government.

Differentiation

The mother company has a total of twelve certifications including organic certifications such as Rainforest Alliance, Naturland, IMO, UTZ, and ISO 2200 for food safety. PO#6 was one of the first tea estates of the mother company to become FT certified. The tea estate examined produces solely organic tea and has multiple organic certifications. It has been certified organic since 2004 and FT-certified since 2001.

FT was found to be the most well-known certification scheme amongst the workers at the two different tea gardens. The key difference between the other certifications and FT certification lies in the FT premium that the workers of Indian FT tea gardens receive, despite low FT sales. 18% of the overall amount of tea produced by the mother company, is sold under FT and benefits are distributed evenly across all of the mother company's tea gardens to guarantee that all workers are being compensated equally and enjoy similar living standards. For most Indian tea companies, getting certified is a strategic decision as they help the tea gardens to better position themselves in the market and to supply retailers who require a broader range of certifications, opening up new sales channels to environmentally or socially conscious buyers from European markets. To become FT-certified, tea gardens must adhere to FT's HL standards. The management of the mother company expressed a certain discontent with the rigid audits, which according to them, were rather inspections. For the management, FT equates to auditing and they wished for more on the ground support and capacity building to improve their processes. They also rated the efforts of administering all the different certifications as quite high, as it takes up 30-40% of all administrative tasks.

Infrastructure

The houses in which the workers reside are provided by the tea companies. Workers found the houses to be decent. All houses, apparently, have access to electricity and most of them have toilets. At the subject farm, there has been little investment in infrastructure over the past years. The greatest development was the construction of pony road, i.e. horse roads that connect the different communities in the gardens, financed by the government's rural employment program. However, the main roads connecting the gardens to larger villages or town are in a bad shape constraining the mobility of the village residents, especially during the Monsoon season, which, in this specific region, can last up to nine months in a year.

4.1.7. Cross-sectional Findings and Longitudinal Comparison

The following section describes common findings and differences in the economic dimension. Firstly, cross sectional findings across the research areas are discussed. Secondly, the perceived development in the economic dimension over time is presented, which is complemented by a reference to the 2011/12 study and its central findings in the economic dimension.

Cross-sectional findings in the economic dimension

In the research area examining the **income situation** of FT smallholder farmers and workers the SPO/CPO cases were generally characterized by farm-gate prices that were both above the FT minimum price and conventional market prices. Another commonality across these cases can be found in challenges related to farm inputs, as prices for farm inputs are continuously rising and in addition hard to come by on local markets. Comparing this picture to the situation of non-FT smallholder farmers it can be concluded that FT farmers generally received higher prices than non-FT farmers for their produce. The coffee case however has to be considered separately, as the concurrent emergence of different phenomena (coffee rust, decline in world market prices, management issues) led to a severe income shock for both FT and non-FT farmers. Consequently, both yields and prices in this case showed a sharp decline which led to a severe deterioration of the farmers' income situation. Liquidity issues of the cooperative in paying the farmers for their produce in due time occurred in different POs at different times. For the HL cases, considerable differences regarding the workers' income situation between the two field studies could be found. Whereas in

the tea field study, workers, due to the *Plantation Labour Act*, were not even paid the nationally determined minimum wage for agricultural sectors, workers in the flower case realized incomes above minimum wage and received additional allowances (e.g. for housing). Yet the recommended Global Living Wage for horticulture in Kenya remains to be fulfilled. Complementary (in-kind) contributions were appreciated in both the tea and flower case, but workers stated that their incomes did not suffice to meet daily living expenses. The situation of workers in the comparison group was described comparably.

In all case studies the respective crop examined was the main income source for the farmers and workers. Nevertheless, smallholder farmers and workers were engaged in alternative livelihood activities to diversify their income sources to some extent. Due to their time-consuming farming activities, interviewees could however only allocate very limited time to these other income sources. In most cases, **income diversification** relied on further agricultural or livestock engagement and had primarily the function of subsistence economy. In those cases where the PO had promoted alternative livelihood activities and skills trainings (e.g. cocoa), these were usually directed towards female farmers /workers (e.g. cake making, soap making, hairdressing). A comparison with income diversification efforts of non-FT farmers /workers suggested for some cases, that FT affiliated farmers/ workers relied more on their main crop, as it proved more economically attractive and more stable than was the case for non-FT farmers /workers. Especially in times of crises, this strong dependence on the focus crop can become a problem and increase the farmers' /workers' vulnerability. This was acknowledged by POs and during such times of crisis they were found to advocate more for income diversification.

With regard to access to and transparency of **information** on prices and wages, workers in the HL cases were well informed about the wage they received and the relation to the nationally determined minimum wage and negotiations thereon. Even though it was not thoroughly understood which factors might influence their final wage, workers in Kenya for instance knew about the pressure Ethiopian flower farms put on the Kenyan flower market and their wages respectively. For the SPO /CPO cases information on final prices was usually rather obscure, as price building even in the FT context can be very complex. A general understanding for the concept of FT, comprising a minimum price as well as a premium, could be observed. Many farmers, especially women, however don't seem well informed about prices and payment procedures, despite information sharing efforts of the FT organization. The cocoa case in Ghana does however stand out, as prices are centrally set for all cocoa farmers, irrespective of FT affiliation or not, and advertised via mass media, which creates high price transparency for all farmers.

Turning towards the research area of **credit and financial services**, the majority of farmers /workers across all case studies reported having bank accounts. This was equally true for the SPO, CP and HL cases. While in the cocoa, coffee and the flower cases, the PO had even formally installed institutions giving out loans (not working out very well in the cocoa and coffee setting), this was not the case in the other field studies. In the Kenyan case a habit/culture of saving and loan taking even seems to have been established. Generally, however, the more common and more dependable form of taking loans in the SPO cases still seems to be informal loans with the purchasing clerks of the cooperative. These can be repaid with their produce income. If farmers /workers take loans it is usually for the purpose of child education, major farm investment, farm inputs, housing or motorbikes. For the majority of cases, farmers /workers only take small loans as they do not have sufficient financial

security and income for major investments. This was considered a difficulty in the Ghanaian case, as farmers lacked the necessary funds for revamping their overaged cocoa plantation. On the other hand, the Peruvian coffee case shows the negative side of having to take huge loans for farm investment, as farmers are now highly indebted with meagre prospects of repayment.

Examining findings in the research area dealing with **vulnerability**, the most prominent issues affecting smallholder farmers' and workers' vulnerability were natural disasters or unsatisfactory weather conditions as well as price shocks and pressure on global commodity markets. This could be observed for the SPO, CPO and HL cases alike. It became clear that farmers do not have any measures of disaster control, e.g. in case of a severe drought or flooding, at their disposal. Nevertheless, farmers or worker affiliated with FT felt much more secure than non-FT interviewees, which was mainly attributed to a guaranteed price floor/ wage, additional allowances and premiums as well as a general feeling of support by the group of likeminded farmers /workers. The latter was primarily voiced in the SPO cases, even though administrative mismanagement as in the coffee case can restrict this effect. Except for the cotton case, agricultural insurance was not yet known or widespread among smallholder farmers, but even there the scheme was not functioning for the benefit of farmers. The same holds true for other medical or life insurance schemes: While in the majority of cases farmers and workers were covered by health insurance, further insurance covering incapacity to work due to injuries or old age, were hardly encountered.

In the research area examining **differentiation** between various certification schemes it could be observed that all POs held one or more additional Voluntary Sustainability Schemes (VSS). The most frequently named were either UTZ, Rainforest Alliance (RA) or various organic certifications. Some POs additionally adhered to local or smaller standards. The first certification obtained for the PO was usually the most well-known among farmers/ workers. Nevertheless, the general concept of Fairtrade as an alternative trading scheme empowering smallholder farmers /workers vis-à-vis global traders and consumers, was known among FT FGD participants. Non-FT discussants in contrast were usually not much aware of the different concepts of certification schemes and their benefits. They rather attributed benefits to the company or PO and were ignorant about their embeddedness into a larger context. One central motive for multiple certifications mentioned in at least three cases (cocoa, flowers and tea) was the fact that sales via the FT market currently fall short of expectations, as only a small portion of produce is actually sold under FT standards.

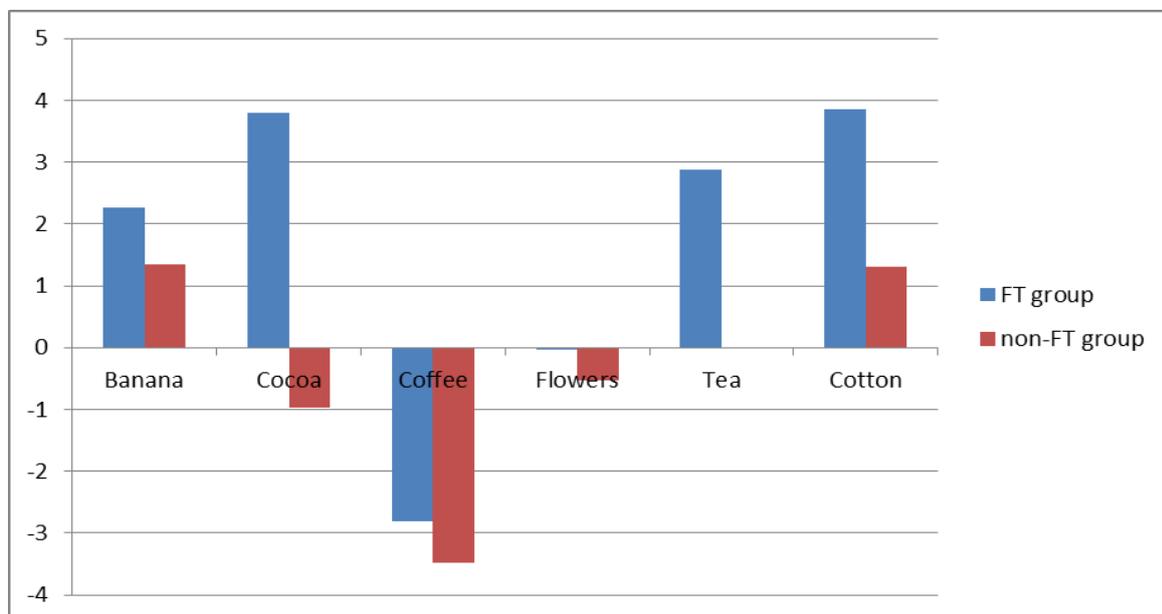
Finally, turning towards the research area of **infrastructure**, FGDs and interviews in all cases reported on infrastructure development projects financed or facilitated by the FT premium. In the majority of cases, across different production settings, these developments benefited not only the farmers /workers directly involved in FT but also the wider community. Frequently named projects related to issues of providing water and irrigation, school education, upgrading processing/ storage facilities or sanitation projects. It could be found that through institutionalized POs it was easier to mobilize partnerships with NGOs, municipalities or further international agencies. In the coffee case it was critically reflected that social impact was limited, as implemented projects were rather large-scale centralized developments, which did not reach remote farmers and focused on productivity enhancement rather than holistic approaches. Furthermore, in at least two cases it could be noted that this community focus can lead to fractions between FT and non-FT beneficiaries (e.g. in the case of scholarships, see below page 85 ff.), when farmers /workers are not fully aware of FT's community approach to rural development.

Longitudinal findings in the economic dimension

In the following section developments over time in the economic dimension shall be explored. Thereby, a combination of insights from the seed assessment exercise of this study and central findings in the economic dimension of the 2011/12 study are shared, ultimately allowing for a triangulation and validation of changes in this dimension. With regard to the predecessor study, in particular the question shall be addressed whether and how key developments detected in the 2011/12 study continue and which further developments can be identified in the follow-up study.

In the seed assessment exercise farmers /workers were asked to give ratings of their current and past (5 years ago) economic situation on a 10-point scale, whereby a rating of [10] denoted a very high satisfaction with their economic situation. Means of the responses given are shared in annex 7.8. Being aware of potential distortions and hence limited comparability of average *absolute* ratings²⁹, Figure 5 depicts the average perceived *changes* over time between the FT and non-FT groups for the six case studies. The rating exercise shows that FT farmers /workers generally see more favorable changes than non-FT farmers /workers – positive changes are more pronounced for FT farmers /workers and negative changes are less distinct than for non-FT farmers. FT cotton producers, for instance, saw much higher improvements in their situation today compared to five years ago and coffee farmers, who were negatively hit by the coffee crisis, saw a lower deterioration in their economic situation than their non-FT counterparts. The majority of ratings display an improvement in their economic situation, the exception being the coffee and – less prominent – the flowers case. Worth mentioning is also the cocoa case, as FT smallholder farmers saw a considerable improvement in their economic situation, whereas non-FT farmers described a deterioration of their current situation.

Figure 5 - Perception of economic situation - Average change



²⁹ While a rating of 7 in one case might stand for a very positive rating, it might denote a low satisfaction in a different case study, hence thwarting comparability between these two cases.

Lastly, the difference in average change between the FT and non-FT group was tested for its statistical significance, thereby providing insight to the question “Do changes over time differ significantly between FT and non-FT setting?”. Thereby, the following results were yielded:

Table 3 - Results on Differences in the Economic Dimension

Economic	FT	Non-FT	Significance of difference FT and non-FT
	<i>Average Change</i>	<i>Average Change</i>	
<i>Banana</i>	2.27	1.34	0.12
<i>Cocoa</i>	3.80	-0.93	0.0001 ***
<i>Coffee</i>	-2.81	-3.48	0.32
<i>Cotton</i>	3.85	1.30	0.0001***
<i>Flowers</i>	-0.42	-0.53	0.21
<i>Tea</i>	2.87	-	-

Note: *** means significant at the 1% level, ** means significant at the 5% level, * means significant at the 10% level.

The following sub-section will elaborate one each case, triangulating both qualitative and quantitative data. In the **banana case** Figure 5 reveals that both FT and non-FT farmers perceive an improvement in their economic situation. The difference in change between the two groups is not statistical significant though. Indeed, the tapping of international export markets in general and being in charge of export processes until FOB, brought about considerable improvements for all banana farmers, as they can now achieve higher prices at less fluctuation for their produce. On top of that, FT banana farmers now count with direct trading relationships abroad, circumventing the economically detrimental path via local traders. In terms of qualitative data, the predecessor study had not been able to identify a non-FT comparison group, hence a comparison between the FT and non-FT setting in economic terms between the two studies is limited:

- FT continues to have an additional impact, as, thanks to the premium infrastructure investments to improve productivity, leverage economies of scale and improve efficiency in processing, are made collectively - something a single farmer by himself could hardly acquire.
- While the 2011/12 study came to the conclusion that FT acts as role model for other players in the region, such as the Dale Foundation of the Dole company, this could not be confirmed in this study. CSR activities of Dale Foundation have stopped entirely without leaving any sustainable outcomes behind.
- The current study also revealed that climate change and increasing competition already impact on the economic resilience of producers in the future.

Quantitative data reveals that FT **cocoa farmers** perceive a strong improvement in their economic situation, which is significantly different from the negative development non-FT farmers perceive (see table 3). As cocoa farmers of the FT cooperative and non-FT farmers alike benefit from nationally determined farm-gate prices, price development alone cannot pose the key explanatory variable. Interviews with both management and FT FGDs emphasized by contrast an increase in yields (induced by trainings on more sustainable and productive farming techniques) and the partial

provision of farm inputs in this dimension. Consulting central conclusions of the predecessor study, a number of continuing trends can be made out:

- For instance, in the 2011/12 study it was observed that traditionally low productivity in the Ghanaian cocoa sector had improved – a development that was again stressed for FT cocoa farmers in this follow-up study.
- FT cocoa farmers generally reported higher incomes than their non-FT counterparts, which stands in close relation to productivity enhancement and reduced costs for farm inputs, as these are partially provided by the cooperative.
- The issue of limited access to loans for cocoa farmers unfortunately remains unresolved with potential negative implications for sustainable cocoa farming.

The **coffee case** on the other hand saw a major economic shock for both FT and non-FT farmers, confirmed by a sharp decline in perception ratings in figure 5. Changes over time do not differ significantly between the two groups. Overall, a substantial decline in income and indebtedness are causing concerns among both FT and non-FT farmers at the moment. Nevertheless, qualitative interviews revealed that especially conventional non-FT farmers were even more prone to exploitation by intermediaries when selling their product on the streets. In the coffee case, the following central continuations from the predecessor study can be made out:

- The predecessor study found FT farmers to achieve on average higher incomes from their coffee farming. This conclusion was partially reflected in this study, but current price levels for coffee are even non-profitable for FT farmers to achieve a sustainable livelihood.
- While a substantial share of non-FT farmer left their coffee plantations and migrated to the city, FT farmer mostly stated that they are yet less vulnerable than conventional farmers, something that was also revealed in the last study.
- In line with the 2011/12 study, savings and financial resources were primarily invested into the farmers' coffee production.

Cotton farmers of the FT group perceived bigger improvements in their economic situation than their counterparts on non-FT farms and the difference in developments between the two-groups is highly statistical significant. As the CPO has been set up around organic standards from the beginning, this can be attributed mainly to increasing and higher prices for organic cotton and the additional provision of farm inputs through the cooperative. Furthermore, it was repeatedly appreciated that selling to the CPO, farmers did not have to transport their cotton to nearby markets, which in turn translated into financial savings. Turning towards central conclusions of the predecessor study, the following conclusions can be made out for the cotton case:

- Income for the FT cotton farmers was reported to be higher than for non-FT farmers in 2011/12 and in the follow-up study.
- However, as the FT group in the 2011/12 study was characterized by higher productivity, this was not echoed in the follow-up study.

In the **flowers case** the economic situation for both FT and non-FT workers has subjectively not improved as compared to five years ago. Despite pay rises and wages paid above the national minimum wage farmers repeatedly reported that their income did not meet daily living expenses as wages did not rise proportional to living costs. This has to be interpreted especially in the light of

progressing urbanization, as the flower farm is increasingly being appropriated by the outskirts of Nairobi and the discussions around Global Living Wage, which was set more than twice as high as the current monthly wage in this area. For the flowers case, the following central continuations from the predecessor study can be made out:

- As in the 2011/12 study, flower farmers complained about disproportionately high living costs, especially for food, which were not reflected in their wage increases.
- The very high appreciation and importance of the FT farm's savings and credit scheme was again confirmed.

For the **tea case** a non-FT group could not be identified, but a longitudinal comparison of the examined FT farm was conducted. The following central continuations from the predecessor study can be made out for the tea case:

- Unfortunately, tea pickers under the FT scheme are still paid below minimum wage, as was the case at the time of the 2011/12 study, and do not have sufficient income to meet necessary daily expenses.
- In-kind transfers and infrastructure developments were and are still valued very much as alternative means for (individual) economic improvement.
- Market shares of tea sold under FT terms are still very low, leading to limited premium payments.

4.2. Social Dimension

The following section elaborates on the COSA social dimension research areas labor rights, education, gender, health and (occupational) safety, participation and perception of social situation.

4.2.1. *Banana Case Study*

Working Conditions and Labor Rights

In this section, it needs to be differentiated between working conditions of farmers (*bananeros*), and workers of the packing stations. Starting with the *bananeros*, it can be said that working conditions have remained quite the same. Usually, farmers are on their plantations from early morning to lunch time, and, if required, go back in the afternoon. Work is tiring and requires physical efforts. In a sense, banana cultivation for the national market is less demanding, as quality control is less and banana plants are cut only once a month, whereas the bananas for exportation are cut twice a month. Banana farmers usually have a five to eight hour working day and work six days a week. Throughout the discussions it was mentioned, that going on vacation is barely possible as they are solely responsible for their lots. Only a few, mostly female, producers, mentioned that they have a permanent worker helping them to cultivate their plants. They also mentioned that they go on vacations once a year. In the past, small holiday tours were organized by the Dole company, but this is no longer the case. Nevertheless, three out of four FT organizations stated that technical inputs and improved machinery have led to improved working conditions in the last years. FT cooperatives confirmed that there is no child labor on the plantations. One FT organization had clear advertisement against child labor in form of posters in their office buildings. Very rarely, youth is accompanying their parents to the field during weekends in order to observe and learn, however, according to most FT cooperatives youth are not interested in farming:

“Children are not working in the plantations; child labor is prohibited. Today children want to advance, achieve better quality of life, opting for university careers unrelated to agronomy.” (Female farmer, FT, BANANA_FGD_7)

Most non-FT producer confirmed the same. Some producers mentioned that their children have to help out on the plantation when necessary, but also stated that most of their children are now in cities to study or work.

Working conditions for *trabajadores*, i.e. personnel working in the export processing such as harvesting, cleaning and packing banana, differs among cooperatives. Two FT organization have set up highly formalized working conditions for their workers, who receive a fixed salary of 40 Soles per day, insurance and fifteen days of holiday a year. The working conditions offered appear to be attractive to young people in the region, making them want to be permanent staff of the cooperative. According to the management, staff retention is substantially higher than in other cooperatives. During the participatory observation at a packaging plant, it could be noticed that all workers of the said FT cooperative wore security clothes and gloves and that music was played on site. In contrast to the said FT cooperative, the non-FT organization and the recently decertified one had a huge garbage problem in and around the plants. The recently decertified cooperative has had trouble with their workers, leading to a decertification in both quality and production quantity. As per the management, most workers are family members, especially sons of the member producers with only a 20% being from outside. Consequently, the work, apparently, lacks formality and strictness when it comes to non-compliance. In the case of the said cooperative, clinches happened between the management and the workers, and the later showed insufficient motivation and attendance.

There are problems of motivation and relationship with workers. They demand a lot. There were quality problems, caused by the workers. One problem is that all the workers are children of the partners – so nobody wants to be strict with them and “family dynamics happen”. (KII, Director, FT)

Lastly, while interaction, including participatory ratings, was possible with workers of packing stations of a non-FT organization, it was challenging due to low education levels of workers and observation by the management. There is some evidence though, that their working hours, and hence income, is not stable and that they are called upon demand. Workers did express dissatisfaction with their life and hopelessness on how to change things for the better. Further research is necessary to assess in more detail the situation of workers who are engaged in harvesting and processing of bananas.

Education

In terms of access to basic education, both the FT and non-FT producers enable their children increased opportunities to successfully attend primary and secondary school. Education is highly valued among banana producers: One female farmer, FT, confirmed that *“education can change a village.”* Two factors have encouraged this development: Public education in Peru is, basically, for free and penetration of secondary schooling in rural areas has improved over the last few years. The quantity and quality of formal education received is, hence, the same for FT and non-FT producers, as they encounter themselves in the same villages with the same access to public schools. Private schools at primary and secondary level are yet rare in the villages. During field visits, the research

team could assess the infrastructure of schools in the area, while interaction with teachers was only partially possible, as most of them were on vacation during the time of data collection. According to the majority of the producers, the access to schooling has slightly increased due to new secondary schools in the area but teaching quality has deteriorated. Mainly this is caused by missing motivation of teachers, but also because violence, drinking habits and household violence have increased in the region. This results that more children achieve secondary schooling but do not necessarily achieve sufficient quality education. The difference in education rather shows at the level of higher education. The producers of organizations who don't have access to exportation have more difficulties to pay university or vocational training fees for their children compared to those who export with or without FT, since both of the latter achieve better and more stable income.

Another difference between FT and non-FT cooperatives concerns support given to schools, thanks to the premium. Evidence could be found that FT organizations, in the past, have supported surrounding schools with infrastructure investments, such as toilets, a sports ground or a roof. In addition, vacation projects and English classes were financed for a limited period of time. More complex projects to tackle quality education issues could not be found. In recent times, the support has partially stopped or become more irregular. The recently decertified organization states that financial issues impeded further support. Another cooperative stated that they take turns each year in supporting schools or the health center with an annual investment of 2000 Peruvian Soles financed by the premium. Recently, NGOs like Plan International have terminated their engagement in the region. Reasons were not directly revealed but considering that village infrastructure and quality of life has improved in the banana villages thanks to export and the emerging role of strong FT cooperatives in community development, NGOs might have seen less need for external support. This goes along with a general withdrawal of international funds from Peru in recent years and reallocation towards weaker contexts, especially in African countries. The education levels of elderly member producers interviewed are very low, with most of them, especially women, not having finished secondary schooling. One FT SPO mentioned that 50% of their producers are illiterate. The education level of SPO members influences their level of participation and surveillance towards their cooperative. Some producers, due to their low educative achievements, feel intimidated during the general assemblies and don't dare to speak up against the management and the president.

The FT cooperatives organize a broad range of trainings for their farmers. They react on external developments, such as the emergence of the *thrips* plague and conduct prevention workshops to mitigate the damages caused by externalities. Also, the issue of productivity is tackled and a joint program of a number of cooperative has been set up. According to the manager of the strongest FT SPO, productivity has increased by 20% in the last five years. Lastly, the strongest FT SPO has started a program with the Inter-American Foundation³⁰ on technical and productive improvement of organic banana production and the strengthening of sanitary, educational and social aspects, hence receiving additional capacity development support by outside players. Trainings are appreciated by all producers, but one staff member mentioned that the sustainability of these trainings cannot always be guaranteed:

³⁰ Further project information can be found [here](#).

“Sometimes the producers are tired of the trainings and after a training there is no action / implementation. They complain that the infrastructure is lacking to implement what they have learned.” (KII, Environmental officer, FT)

Low levels of education among producers also have an effect on the attendance of capacity building workshops and trainings, as farmers sometimes excused their non-attendance with their insufficient capabilities to understand and learn. A group of women argued that they feel not confident enough to take part in the *Escuela de Líderes*, i.e. the leadership school. Even among the strongest FT, there was a call for more frequent trainings, especially on how to improve their quality of life, environmental issues and, better treatment of plant diseases.

Gender

In the households of banana producers, men are in charge for most of the work done in the fields. There are, however, also a substantial number of cases of widowhood and divorce, leaving women being the sole earner for themselves and their children with their main source of income being banana. Only the ones with higher earnings, can afford to hire a worker to help them in daily working with plants. The percentage of women in the cooperatives ranges from 11% to 30% of women.

According to the majority of female producers, the situation of women has slightly improved in recent years. About half of the female cooperative members included in the study did show increased self-esteem and communicated that they were able to take their own decisions. While some said that *machismo* being further on decline, others mentioned that it keeps being the same. Single cases of household violence and discrimination against women were heard even in FT settings – especially among producers of weaker institutions. Another issue of concern at community level is that many men still impede women to take up jobs and become financially independent. As per the producers, most of them decide jointly with their husband about the household income. Still new challenges arise due to an increase in alcohol consumption, making women feel unsafe during evening hours. Lastly, teenager pregnancies are an increasing phenomenon, especially among producers who still are close to poverty levels.

A second positive development in this regard is that single women take on leadership positions within the FT cooperatives. One of the cooperatives, for the first time, has a female president elected, in a second one a female vice president is assuming her office. Another one has established that in the round of directives, at least one woman must be in the position of a director. Lastly, women are now also working in the packing stations, e.g. putting stickers on fruits, even though their share remains still low (approximately 16%). However, these improvements are not yet satisfying, considering that shares of women in staff and leadership positions still is the exception. A good number of women expressed that they still feel less self-confident when it comes to participation and leadership trainings. It should be also noted that one woman in a FT SPO had the opportunity to be named vice president but resigned because she did not feel capable of the position. Also, some men doubted the suitability of a female president, as they indicated that they would not feel confident asking for some services, for example, advance payments for the fruit.

Efforts to support women and fight gender discrimination are being made by the stronger FT SPOs, such as motivational workshops or trainings on diversifying income (cooking, baking classes) or studying further on Sundays. Likewise, the popular FT instrument, the leadership school, is held in

some SPOs with FT, but participation of women still is only at a 10%. In the recently decertified SPO, women are not organized in a certain group or attend specific gender-related activities.

“We agree that it also depends on ourselves, we do not claim the president, why our proposals do not go through. We also feel shy in front of the delegates. We believe that there is discrimination against women. There are always the same [men] speaking.” (Female participants, FT, BANANA_FGD_7)

It should be noted that the toughest comments regarding gender were made by women who are members of SPOs that are not FT certified. They stated that not only do they not participate much in strategic decisions but are also not heard in the assemblies. Sometimes they are even disrespected and told that meetings are only for husbands and other members asking them "Why they even come to the meeting?". Lastly, female producers of the comparison group indicated that the situation for women is better in the stronger FT SPOs.

Health and Safety

Health status and facilities were visited in the villages of Querecotillo, Samán, and Salitral. While each health center or post does show sufficient infrastructure, medical personnel is missing in some cases, and most postings are only occupied half a day. Furthermore, health posts do not always count with a doctor. For emergencies, it is essential to go to the hospital in Sullana. The health center in Samán at least counts an ambulance, which facilitates quick transport to the city. Most common diseases are diabetes,

cholesterols, hypertension and diarrhea. VIH and tuberculosis are less of a problem and controlled. Medical staff of all facilities confirmed that an emerging issue in the village is alcoholism, as consumption has increased substantially in the last five years. Also, due to the El Niño phenomenon, now increased cases of dengue are found in the area.

Health insurance is complicated for producers in the region. The norm is that farmers have SIS, the state insurance for people of extreme poverty. SIS enables farmers to visit the health posts in der village without extra payment. More complex treatments require transfer to hospitals. However, two FT SPOs have promoted and supported membership to the more elaborated *EsSalud* insurance by sharing information about the insurance and affiliation and covering 50% of the monthly insurance fees. One SPO covers the entire fee for farmers above the age of 70. According to their management, they have achieved greater coverage among their producers than SPOs that do not give support.

Once a producer is insured privately, treatment in the public health centers is not for free, but hospital treatment in the city of Sullana is. As often, transport costs to the city are higher than costs for treatment at health centers, many banana farmers end up going to the latter one still, especially to seek treatments for cuts or bruises. Hence, it remains unclear which insurance is the most effective for banana producers and current treatment appears to be insufficient.

An important aspect related to health is the issue of drinking water. In general, the issue of access to water is a problem in the province of Sullana, especially in rural areas, where the localities only provide piped, non-potable water, which is only accessible for two hours every 10 days. Irregular supply of clean water and, hence, poor water quality as well as insufficient hygiene practices can lead to an increase in water-borne diseases, such as diarrhea, and parasites. Recognizing this issue, one of the organizations with FT has started to daily provide treated piped water to the families of Samán.

Health investments vary highly among SPOs, including those who are FT certified. One FT cooperative has established their own health center, with an investment of approximately 28,000 USD. Another one has employed a part-time doctor catering to the banana farmers and workers during three days a week. The salary is covered by the FT premium. However, medicine he is providing are gifts from pharmaceutical companies, which he is then giving away for free. Some FT cooperatives finance half of their members' private health insurance. Most FT cooperatives, being predominantly pushed by the local health authorities, finance health campaigns conducted by the health centers, or provide direct financial contribution for funeral expenses to families when a member dies (1500 soles approx.). Furthermore, health centers / postings are supported with infrastructure and/or temporary financing of personnel. The recently decertified one, for instance, has financed ultrasound personnel in 2016 for a period of three to four months. Previously, they also financed insurance for their members, but had to stop due to financial instabilities. Interviewing health personnel in the posting revealed that support given by SPOs is quite sporadic, e.g. financing a medical for a short period of time, or one-time investing in infrastructure. It does not necessarily lead to sustainable outcomes yet.

“Nowadays, it needs more support from the banana companies, there is no continuity or sustainability of the investments.” (CI, doctor, FT)

This has also been recognized by the project team of two FT organizations. The strongest among them is currently working together with a health posting on a more sophisticated project that should bring along more impactful results.

On the subject of safety at work, the producers indicate that the banana is a low-risk job, which does not cause many serious accidents: Reported accidents include falls of ladders when they have to climb to do the maintenance of the banana, cuts and cuts. Some organizations with FT have built small pedestrian bridges to cross the irrigation canals, to avoid falls when farmers move the product. Likewise, there are first-aid kits in the packing stations and a person trained in first aid.

The comparison groups show the same diseases as farmers with FT (diarrhea, respiratory, parasitosis). However, extra investments in health by their associations, such as a doctor catering solely to *bananeros* could not be found. They also indicate that only a few have insurance from *Essalud agrario*, some have SIS and a large share does not yet count with any insurance. Non-FT producers also take part in the health campaigns implemented by local health centers and financially supported by the FT SPOs.

Participation

The majority of producers during the FGDs confirmed that decision-making mechanisms and institutional structures are well established in the FT cooperatives included in the study. In general, annual budgets and premium investments are discussed and approved in the general assembly, where all members can participate. In addition, delegates are elected to communicate changes or receive input by producers between the meetings. Yet, there are still factors that hamper the participation of producers in these processes. As mentioned, firstly, educational level plays a fundamental role, as some producers expressed that they tend to be shy during reunions, “don’t dare to raise their hands”, and fear not to understand issues discussed in those spaces. Likewise, better education also allows only a few to hand in more realistic and acceptable proposals. Still, even

for them sometimes they do not receive a justification of why certain proposals are rejected, which calls for improvement in transparency and communication. Especially women mentioned that they don't feel confident enough to share their requests with the delegates.

A second prevalent problem in the Chira Valley that was pointed out is nepotism and corruption of some FT SPOs. It was indicated that the entering managers hired many workers who were friends of them. Sometimes they did not match the positions they assumed, leading to higher expenses for the SPO due to the provision of necessary trainings, or did not resign when showing bad performance, but were put to other positions instead. Transparency on the hiring processes was missed by some producers and caused dissatisfaction, that even led to fragmentation of some cooperatives.

Regarding youth participation, it should be noted that in most cooperatives children of members tend to seek higher education, and different jobs. Often though at last one of them remains to continue working in the field to support their parents. Adult farmers usually work as long as their health allows them to, that is to say working up to 70 - 80 years, and the ownership of the plots does not pass the children's names until their parents die. Therefore, the average age of plot owner is high, and children end up receiving ownership of land in many cases at the age of 50. Then only they can become a member, leading to the fact that, on average, only 10% of members are, currently, under 35 years old. One cooperative actively attempts to integrate youth in their cooperative and has specific workshops for them. Participation of persons under 40 has now increased to 35%.

4.2.2. Cocoa Case Study

Working Conditions and Labor Rights

Topics covered in FGDs with the farmers centered on questions of child labor, knowledge of rights/entitlements, daily working hours as well as the share of and influence of organized cocoa farmers in the communities. FT cocoa farmers seemed very aware of the sensitivity of the topic of child labor and reported having received trainings on the subject through the cooperative union's extension officers and the campaign "It takes a village". They agreed that young children would not assist on the farms. Discussing this matter with both female and male cocoa farmers some stated that on the weekend children sometimes helped by taking care of younger siblings or by carrying things home. In one community it was reported that through the cooperative union FT farmers had access to a handcart to carry harvest or equipment and hence did not engage their children for this purpose. Non-FT farmers of the same village on the contrary mentioned using the help of their children for carrying at times. While non-FT farmers seemed in general aware of the various discussions on child labor, the cooperative union cocoa farmers appeared much more conscious of the sensitivity of the subject. This might however also result in guarded replies due to social desirability.

Asked about their daily working hours replies for FT and non-FT cocoa farmers did not differ considerably, reporting between 4 and 6 hours of working on the farm. In terms of farmers' rights both groups were not acquainted to the concept but knew they were entitled to a certain price per bag of cocoa and a government bonus. In management interviews it was revealed that the cooperative union occasionally runs a radio program informing tenants about their rights vis-à-vis land owners in an attempt to avoid land owners taking advantage of them. One FT farmer added:

“We do not know the rights of farmers but in the (...) cooperative, we know that all members have equal right in sharing their opinion about a subject or topic.” (Female participant, FT, COCOA_FGD_15)

Looking at the overall share of cocoa farmers in Ghana organized in unions or cooperatives it becomes clear that this is still a minority, even though it was mentioned that cooperatives were increasingly being formed. This means that the majority of cocoa farmers is currently not organized in any form to express concerns or approach the authorities with one voice and greater weight. Even though FT farmers were of the opinion their voice was heard within the cooperative union, they were equally doubtful about their ability to influence decisions outside the cooperative union at the national level.

Education

With respect to continued education for cocoa farmers huge differences between FT and non-FT farmers could be observed. While FT farmers reported receiving trainings between 2 and 6 times per year, non-FT farmers stated to rarely or never benefit from trainings by government extension officers. One male non-FT FGD participant even said that he has not gotten any training since 1986. Topics covered in FT trainings relate to issues like child labour, occupational health and safety, good agricultural practices (pruning, disease control, fertilizer application, harvesting and fermenting etc.), literacy, record keeping or alternative livelihood sources for women groups. To this end the cooperative union has institutionalized some projects (e.g. a gender project) and a system with trained extension officers who are responsible for attending farmers in their villages in a designated zone on a regular basis. These extension officers are made possible by the FT premium. One extension officer reported being responsible for 19 and 20 zones (villages) respectively in two societies (districts), visiting each village at least three times per year. As part of their duties outreach officers train farmers theoretically, monitor farm activities (compliance to certification standards) and also assist the farmers practically on the farms, as one cocoa farmer confirms:

“The cooperative explains things to us for us to understand. They train us in theory at home and practice it at the farm. I have gotten 2 scholarships for my children in Secondary School. It has really helped me to improve.” (Male participant, FT COCOA_FGD_7)

The majority of cocoa farmers, both FT and non-FT, have not finished secondary education, with literacy rates being considerably lower for women. In interviews with cooperative union management it was confirmed that literacy trainings were attended by a greater share of women than men. In the view of cooperative union officials, the trainings have improved greatly the management skills of farmers as well as cocoa yields over the years. It is particularly interesting to note that FT and non-FT cocoa farmers report that FT-trained farmers often pass their knowledge on to neighboring farmers or that non-FT farmers turn to trained farmers for advice. Not uncommonly, non-members sometimes participated in the offered cooperative union trainings.

Turning towards the situation of child education and measures taken to encourage schooling and prevent child labor, it is noteworthy that the cooperative union has adopted a child labor policy in 2009 to give guidance on conditions under which children are allowed to support family farming (does not interfere with their schooling, is not exploitative or dangerous to their wellbeing and is supervised by a family member or guardian). Traditionally, it is common practice to engage family

member in the production of cocoa in Ghana, which includes the involvement of young people as it regarded as a way of teaching them about cocoa production to prepare them to take over when the parents are older. Among others, FT farmers are educated about the benefits of quality schooling. When asked about what cocoa farmers spend their income on, the education of children was overwhelmingly the first response by participants of FGDs. Investment in the schooling of children was indicated as important, yet it also indicates the financial burden associated with it.

Non-FT farmers admitted that children occasionally started helping on the farms between ages 12 or 15 but added they would not perform hard work and only helped on weekends. All cocoa farmers seemed aware of the importance of the topic, sometimes suggesting guarded replies to questions during FGDs and interviews, which should be kept in mind as a potential limitation of findings.

“They (children) help us mostly during harvesting of cocoa, gathering of the cocoa pods and carrying the fermented cocoa from the farm to be dried.” (Female participant, non-FT, COCOA_FGD_16)

In one community it was stated that three government and three private schools were present and hence up to 85% of children were able to attain education up to secondary level. Farmers added that especially the number of private schools was increasing in their communities. This was complemented by various statements from both FT and non-FT farmers that an increasing number of children continue to secondary school and later on move to the cities for better jobs. However, this community was located on the direct outskirts of the regional capital Kumasi and the situation appeared somewhat different in more rural communities visited later on. On these occasions children could be observed by the research team in the streets during schooling hours or helping in the construction business. In one community it was critically acknowledged that children without parental guidance might be inclined to work in illegal mines in the vicinity.

Generally, school supply and school accessibility are identical for FT and non-FT children. In one community the FT premium aided the construction of a Presbyterian school, which exemplifies the cooperative union’s engagement in constructing/refurbishing a total number of eight schools and two classroom blocks. As indicated in the quote above, occasionally well performing children of FT farmers were supported by stipends enabled by the cooperative union (Fairtrade UK, 2018). Asked about a comparison to the situation five years ago one non-FT FGD participant shared the following interesting insight:

“Five years ago, parents even say that if you go to school, there is no job guarantee but now it is different.” (Male participant, non-FT, COCOA_FGD_14)

Gender

Within the FT cooperative union, a gender program was established in 1998 to address issues related to gender inequality among cocoa farmers in the cooperative union. Under this umbrella, different measures like leadership trainings, alternative livelihood projects, literacy courses and micro credits to women’s groups are facilitated. Most popularly recited in FT FGDs were alternative livelihood trainings such as capacitation on soap making, ginger farming, tie-and-dye and *gari* processing. In this regard other non-FT cocoa farmers (women) acknowledged that they did not receive such trainings, were not organized into gender groups or equally could not acquire group loans for investing in other business activities from their cocoa buying company.

To give an example, one FT gender group mentioned having a demonstration farm where other crops were cultivated and after harvesting, the proceeds were sold for the benefit of the group. For some of these activities however the question of (financial) sustainability arises, as there were some indications that after discontinuation of the initial financing and/or close guidance some projects were not fit to survive self-managed. Non-FT women cocoa farmers were individually also engaged in other livelihood businesses such as selling clothes but had not been organized and not received trainings on issues like record keeping and basic literacy.

The share of women among cocoa farmers in the cooperative union has risen to one third from initially 26%. Among leadership posts an even higher share could be found with presently 6 out of 13 members of the National Executive Council being women, including the current president and the treasurer. During FGDs with FT members this impression was supported, as both women and men assured that women were very vocal at group meetings and trainings and their opinions and suggestions were heard and valued. It was noticeable that in some communities it was more difficult to find female non-FT participants for the FGDs. Discussing specific challenges for female cocoa farmers both FT and non-FT farmers were not overly aware of any specific obstacles, like e.g. dual burden taking care of food provision and child care in addition to farming. In talks with cooperative union management the issue of land ownership as potential obstacle was brought up, as sometimes men could more easily obtain land for farming. This view was however contrasted in FGDs, where it was understood that farms were often inherited through maternal lines. However, as men were physically stronger, it was thought that this could result in lower yields for women. Due to the sometimes strenuous working conditions of cocoa farming, women at times depended on the support of male family or community members, or as one female non-FT FGD participant recounted:

“Some of the challenges we encounter as female farmers is our inability to spray our farms, sometimes also it is difficult for us to weed our entire acreages. In these circumstances we have to hire laborers to do the spraying and also weeding. When it happens this way, we spend much of our income for paying labors and there increases our financial burdens.” (Female participant, non-FT, COCOA_FGD_2)

Health and Safety

The FGDs revealed that majority of FT affiliated farmers have received trainings on how to wear protective clothing as well as safety measures on the farm. Hence, most of them confirmed they protected themselves adequately with protective clothing during farm activities. As part of the incentives given to FT members they sometimes even receive protective gear such as boots from the cooperative union. Another subject of discussion in such trainings was the proper storage and disposal of chemicals. In this matter FT farmers knew that for the health and safety of their families agrochemicals should not be stored in or close to bedrooms and kitchens and containers not re-used for food items. One FGD participant summarizes:

“We have been cautioned not to keep chemicals in the homes especially in the bedrooms and close to the Kitchen. This is because the chemicals are hazardous and can contaminate the food and drinking water. For the safety of children at home such chemicals should be kept at a distance from the children.” (Female participant, FT, COCOA_FGD_5)

Largely, non-FT cocoa farmers were not oblivious of the safety measures and precautions to be taken on the farm. Most of them also reported wearing protective clothing when undertaking activities such as spraying. They also knew that the government has recommended people who can do the spraying. In these instances, they are encouraged to stay away from the farms so as not to be affected by the chemicals.

FT and non-FT members share the same health facilities in their communities. These were said not to have changed or improved in the last years. But for one community visited, most people still have to travel long distances to a clinic facility. Against this background the FT cooperative union has (recently) taken measures to improve the availability of health services. For one, in the cooperative union headquarter, there is a facility to attend sick members; in addition, a mobile clinic has been introduced, which stops at FT communities, offering medical check-ups and consultation to cooperative members and non-members alike. At the time of data collection, the cooperative union was also in the process of establishing a telemedicine service, making use of modern information and communication technology.

Almost all FT cocoa farmers stated to have health insurance in the form of the government provided insurance scheme. As the cooperative union is rolling out its own complementary health insurance system, a minority of members has also taken up this insurance which was understood to cover all treatments and medications. It was not transparent for the farmers, which services were covered by the basic government insurance, sometimes fueling the feeling that despite insurance they have to pay. Few non-FT farmers had not renewed or not yet subscribed to any health insurance scheme. Cost for the government insurance was reported at 230 GHS and was said to be a prerequisite for subscribing to the additional cooperative union insurance at 100 GHS.

Participation

With a sizeable membership of more than 100.000 cocoa farmers, the cooperative union visited for this field study has implemented a three-tier system to facilitate greatest possible participation of all members in decision making. This structure recognizes the village, district and national level. More precisely, member farmers are organized into approximately 1300 communities (zones), which form 57 primary societies (district) in six cocoa growing regions. The governance structure distinguishes zonal executive committees at the community level, society executive councils at the District level and the national executive council who is elected by a national assembly to formulate policies at the National level. This new structure was adopted in 2015 to “strengthen farmer commitment, ownership and transparency as well as to further deepen grass root participation in decision making. Interviews with management staff supported this view, that the cooperative union was now more decentralized than before. More competencies have been transferred to the district levels instead of the national level (e.g. decision taking about premium-financed projects at the district level). Due to this reorganization, the cooperative is now registered as an official cooperative union under Ghanaian law with 57 primary society affiliates.” (PO#2 website, 2017). Of the 13 members of the national executive council, six are elected representatives for their region. The everyday running of the cooperative union is managed by the administrative secretariat headed by an executive secretary.

“Before the premium comes, we do an annual general meeting to decide what we want to use the money for.” (Male participant, FT, COCOA_FGD_7)

FT farmers at the village level were aware of this organizational structure, as the quote above shows, but of course the village level was their major reference point for active involvement. Both male and female FT farmers valued the groups as a forum to voice their opinions freely and influence decisions, for instance on the distribution and use of the premium. In some villages women were additionally organized into women’s groups and got training on additional livelihood practices or could apply for group loans. The perceived value obtained from participating in the FT cooperative union was unanimously regarded as very high.

In contrast to statements by non-FT cocoa farmers, the cooperative farmers said they felt united as a group and supported each other in times of need. They explicitly saw this in direct contrast to the non-FT farmers. Also, a culture of transparency and trust among members was named. Asked about the intensity of participation of female FT farmers, the very same reported that their participation is strong and that women are generally vocal at meetings and trainings. They felt their opinions were accepted in discussions. Some women even were of the view that at most meetings the female farmers contributed more to discussions than the male farmers. During FGDs with both FT and non-FT farmers it became apparent that there were usually no other farmers’ or community development groupings present in the villages. In complimentary interviews with community opinion leaders this aspect of self-organization and working together as a group was seen as crucial starting point for sustainable community development. Yet it was critically reflected, that there may still be a long way to go to foster experiences of greater self-efficacy.

“There are no groups in our community apart from Kuapa. We only participate in meetings which are organized by the chief.” (Female participant, non-FT, COCOA_FGD_2)

Ultimately, discussing the participation of the younger generation in the cooperative union both FT and non-FT cocoa farmers drew a rather negative picture. This was complemented by information from management interviews, which revealed that currently approximately only 30% of cooperative union members were between 18 and 35 years. In addition, during FGDs it could be observed that participants counted usually 40 years and above. To this point, FT FGD participants stated that young people’s participation in the cooperative union has rather gone down over the past years as they attended school, completed university and went to the cities to work there. This impression was equally voiced by FT and non-FT participants and it was a reason for concern for the farmers. One farmer saw a slight distinction in this regard between communities in very rural areas and further developed communities:

“Most of the youth rather prefer to settle in the urban areas for their livelihood. They are also interested in white collar jobs rather than farming. As compared to other communities where farming is the main source of income and occupation, most of the youth in such communities involve in farming but not in our community. This is because our community is relatively developed.” (Female participant, non-FT, COCOA_FGD_2)

4.2.3. Coffee Case Study

Working Conditions and Labor Rights

When discussing the conditions of work, it needs to be differentiated between those of the farmers, the workers hired during harvesting season, and the administration of the cooperative.

The conditions for producers have remained the same over the years. They have intense working hours during the harvest (from 4 am to 8 pm) and regular eight hours days during the rest of the season. All farmers interviewed described their working conditions as very tiring and on top of that farmers that live far from a motorized road, have to carry on their backs 30 to 60 kg to find transport for their production, which takes it to the collector site. They usually do not work on Sundays, but don't go on vacations. In former days, before the terrorism in the 90s³¹, they used to go for one-month visits to other states. The majority of producers is between 50 and 70 years old and a pension system does not exist for them.

During the harvest season coffee farmers hire laborers to support them in the process. However, it was reported that in recent years it has become more and more difficult to find laborers willing to work in the *chacras*. They receive 30 Peruvian Soles per day and housing and food in addition. Formerly, they were coming from Cajamarca, a northern state of Peru, but supply of laborers has substantially decreased. The ones that are willing to work demand higher prices, which in return has a negative effect on production costs and final profits of the farmers. FT farmers reported that the lack of laborers brings them in difficult situations and requires them to do more work by their family members. Despite the lack of workers, a hundred percent of FT farmers did confirm that children do not work on the plantations. They were well aware of the national law and FT policy that forbids the same. This, however, was not true for non-FT farmers, especially the ones who live remotely in small communities. Here some farmers admitted that children need to help out on plantations if necessary and children of twelve years support the harvesting, whereas children of 16 years help both in the cleaning and harvesting.

20 people work in the administration and management of the FT cooperative and priority is given to family members, especially the next generation, of members. Working conditions for the staff appear to be good. They usually work eight hours a day, in a well-maintained office in La Merced and receive benefits, such as health or emergency report. The director stated that the previous management was responsible for over-spending on administration and staff and he that now enforced a cost reduction of 20% to keep the cooperative competitive. Lastly, workers are hired for the collector and processing site every year. They have pre-determined contracts and work for four months a year. According to staff of the FT cooperative, these workers receive benefits such as uniforms, safety clothes (shoes and gloves), beverages and even food, and can receive 50% of health costs, in case they fall sick. They receive 1400 Soles for 24 working days in a month and additional 300 Soles if they work on Sunday. This income is higher than the minimum wage (950 Soles a month). Still for the rest of the years workers have to look for other income generating activities.

Non-FT cooperatives did not count with their own infrastructure and, hence, have not been yet institutionalized to an extent that they have their administrative staff and workers. They, majorly, depend on outside companies to process their coffee, which often relates in higher costs for them and discounts the price of coffee even further.

³¹ Farmers included in the study have tremendously suffered from the terrorism of the 'Shining Path' in the 90s. References to this time and the suffering and killing caused by the terrorist groups, were mentioned throughout and, these painful memories still influence the perception on life when thinking about the past. Most of the communities are now devoted to Christianity, attributing a high value to religion in their life.

Education

This sub-chapter deals with the educative formation of farmers and their children, as well as additional capacity development trainings received. It also examines the investments made with the FT premium. The majority of FT farmers has not finished secondary schooling. Among elderly female producers, cases of not even attending primary school can be found. Men usually do count with primary school and some of them even finished secondary schooling.

While first generation farmers of the FT cooperative lack sufficient education, and often wished for better educative formation to engage in the cooperative, it could be noted during FGDs that their children did finish secondary school and, partially, even continued to study at universities in La Merced, Huancayo or Lima. The FT farmers firmly enabled their children a better future by investing in their education:

“Studying will serve them to defend themselves, to know how to speak out loud and write down what is happening. This will help our children to move forward.” (Male farmer, FT, COFFEE_FGD_1)

Again, this is not the case for all FT farmers, since for some families the distance between their houses and the schools, which signifies in some case up to two hours walking one-way. According to one FGD, children of distant native communities often do not count with regular school-attendance. The coffee rust plague has accelerated higher drop-out rates of school children from families living remotely to the villages.

In the last five years, no FT-led support projects for primary and secondary schools in villages of farmers could be identified. There is some evidence that in 2013 a small school kit was given to students of the primary school in the village of La Florida, financed by the premium. FT farmers do believe that more investments would be necessary to improve education levels and would wish for schools being equipped with computers and other technological devices.

However, one new initiative in the field of education, which is financed by the premium, could be identified. Recently, a vocational training project in La Merced has been taken up again. This new project is jointly implemented by CETPRO, a private technical education institute contributing with 10% of project financing, PINIA, the national program for agriculture innovation, a governmental program contributing with 60% of project costs and the FT cooperative, which finances 30% with the help of the FT premium. The project aims to train 50 farm producers, their children and relatives, to become technicians in agriculture and animal husbandry of minor species. From them, 15 women and 15 men from native communities are going to receive full scholarship that cover tuition, housing and food. It is going to last 14 months and it starts in March 2018. Between 2006 and 2011 a similar vocational training program existed and the FT cooperative could support children of members with five scholarships. At the moment only half a scholarship can be given out.

For most non-FT farmers, the urge for achieving better levels of education for the children could not be recognized to the same extent as FT farmers. Most female non-FT producers, between the age of 20 and 30 years, stated that they did not finish secondary school and often had to help out their parents in the plantations. Many of them got married and had children at an early age – between 16 and 20 – which was apparently common for young people within the village and, in general, is a social issue among Peruvian low-income class. According to the FGDs conducted, around 70% of youth do not achieve further studies but start working to support their families. Due to their lack of

education, it will be very difficult to be less dependent on coffee as primary source of income and risks of encountering them in the circle of poverty appears to be high. Unfortunately, the situation for their children appears to be similar. In one remote non-FT village, the governmental secondary school of the village had recently been closed, impeding most children of the village to obtain higher education and hence breaking the circle of poverty. None of the communities, without FT certification, received any kind of support from NGOs.

Besides traditional education, this research area also explores capacity building measures given to coffee producers on the one hand and staff on the other hand. Male FT farmers confirmed that they receive three to four trainings a year, while women did either not take part that often or did not remember well the content of the same. Last year's capacity building measures centered around ecological issues, like preparing of compost and planting below shadow, and trainings on diversifying their sources of income (e.g. breeding of guinea pigs). They also received clarifications on the development of coffee prices and determining factors of the same. According to the management, once a year a specific capacity building workshop is given to help members apply for director positions within the cooperative. Requirement to participate is that 80 to 85% of the annual production was given to the cooperative in the last three years.

In general, FT farmers are satisfied with the capacity development measures they receive, however sometimes they would need a "more simple language" in the courses and encouragement to participate. They'd prefer more in field trainings instead of classroom trainings. Capacity building on gender issues had not taken place for a long time, according to the female FGD participants.

According to most employees, the FT cooperative provides regular capacity building and training for their administrative staff and management. The issue with organizational capacity building in any project is that fluctuations mitigate the positive effects they can have. In the FT cooperative at hand, between 2012 and today, there has been new management / a new president every year. This shows that spending on capacity building at management level needs to be considered carefully, since, despite need for learning for new management, the long-term effects might be lower compared to other investments, as for instance training for producers, fertilizer support and investments in the plantations to improve coffee quality.

Non-FT farmer did partially receive training by state programs on either strengthening their association (1 case) or diversifying their sources of income (independent farmers). FT farmers did not have access to these trainings offered by the government.

Gender

Approximately 28% of members are women in the FT cooperative in the cooperative at hand. It was stated that women most often become producing members when either their husband had died, they inherited land from their parents or there simply wasn't any other work available for them. The FT cooperative emphasized that women and men are treated equally in terms of prices paid or participation in the general assembly. Since it's obligatory to participate, women do take part in the reunions and assemblies. However, general knowledge on institutional issues, especially among elderly, less educated female producers, appears to be very low. For instance, some of the women were not aware of the FT premium and how it is used and mentioned that they do not understand how coffee prices are determined by the cooperative. There has not yet been a female president in

the FT cooperative, but, apparently, 7 – 8 women are heading one of the 18 local committees. Among administrative staff, women are currently posted as head of accountability, responsible for exportation and responsible for education and social issues. The cooperative has also imposed that at least one director post must always be held by a woman.

As mentioned in the 2011 study, the cooperative had initiated, with the financial support of a Swiss NGO, CODEFAM, a women committee that provides small grants to spouses of members to pursue different sources of income. In 2011, already 350 grants were given out, but women lacked capacities to invest it appropriately leading to unsustainable outcomes. However, at this point of data collection, the women committee is no longer functioning. Spouses of producers mentioned that it had stopped several years back and they now do not have any specific activity to promote women participation. Just when the research team left, there was, apparently, a call for a new meeting for CODEFAM women to take up again activities of the committee. Further investigation is necessary to see whether it had taken place and activities will continue.

Machismo in the household is still an issue, but according to several FT and non-FT stakeholders, including female producers, it has shrunk in the region. Alcoholism is reported to not be an issue, because there are no financial means available to afford it. Household violence was also seen as occurring rarely. A peculiarity among young non-FT female coffee producers was that due to lack of awareness, sexual education and use of contraceptives, teenager pregnancies were very common with male partners often not taking responsibility for the child. Hence, young women had to take care of their child on their own, impeding them to study further or obtain better livelihood or indicated through the data collection.

Health and Safety

70% FT farmers are covered by SIS (Seguro Integral de Salud) – the Peruvian state security for people with low incomes. This basic health insurance allows them to visit Health Centers of their villages without costs. For emergencies, they have to go to the city of La Merced and often pay for themselves (the alternative is to go to the Health Center first and receive a reference to the hospital). The cooperative attempts to support those who are not covered in applying, however, one main issue is that persons that count with debt are refused access to the SIS insurance, since they do not qualify. When a member dies, the cooperative supports their families financially by paying for the coffin and providing 3000 Soles. In 2009, the cooperative made a contract with EsSalud, another type of social health insurance (with a 12-dollar cost per month) that serves to receive hospital treatment, enabling access to it for approximately 33 producers, a very small share of total members. In the villages visited of FT producers, there were health centers in each. The health centers of La Florida and Alto Yurinaki count with a doctor, one or two further specialists and nurses. In Alto Yurinaki, medicine is sold through a private pharmacy store, where the owner is the nurse herself. Yet, access to these facilities is much more difficult for families living in the annexes far from the villages since transport is barely available. Major diseases are diarrhea, respiratory diseases, parasites and anemia. Diabetes is on its rise and requires costly medicines that are often only available in the cities. Malnutrition continues to be a serious threat to self-sufficient families and native communities who live outside of the villages. Case of HIV and tuberculosis are very rare and under control. Malaria has

decreased compared to 2010, but the leishmaniasis³², a neglected, tropical parasite disease, has been more frequent recently. While the FT cooperative stated that they implement medical campaigns, farmers mentioned that these are conducted by the health centers. The latter was confirmed by the centers themselves as well.

In a non-FT community of producers, only 30% were registered under the SIS. They declared to lack knowledge on how to register and do not receive help from outside to do so. When they fall sick, they mostly help them out between each other, or for more serious cases they take up credits to pay for their treatment in the city which is four hours away. In their village they do not count with a health center, but only a medicine locker, which has been empty for the last years. In a second comparison cooperative, they do have a health center with one pharmacy technician, but no doctor. A non-FT producer from a native community explained that they would only use herbal medicine, since the distance to the next health center was too far.

Common diseases among non-FT farmers are similar to those that are part of the FT cooperative. According to the health center personnel interviewed, malnutrition is very common among native communities and families living remotely. However, when inquiring in these communities, they stated that they had good alimentation due to their home-grown vegetables and animal husbandry. At the same time, awareness on the issues of anemia and other deficiencies was low. Further research is necessary to verify whether malnutrition does exist and communities are simply not aware of it.

Participation

The FT cooperative at hand is one of the largest ones with, currently, around 700 members. It is structured in 18 committees, which gather between 40 to 200 producers depending on their location. Each committee has a steering committee³³, divided into five positions (president, vice president, secretary and treasury). These committees are in charge of sharing updates and information with the farmers, so that they are well informed before the general assembly. The general assembly takes place two times a year and members described the relation as cordial and participatory, which apparently has always been the case. However, it also needs to be noted that some FT producers from more remote regions complained that the participation in any kind of assembly or gathering is mandatory and financial penalties are given for non-attendance. Considering that the transport to La Merced is approximately 10 Soles (e.g. 2,5 €), mandatory attendance represents an additional financial burden for some farmers who live remotely at the threshold of poverty.

Most producers are elderly, between 50 and 70 years. Different FGDs confirmed that there are less members below 35 years. This number has even decreased in the last five years due to the difficult situation of the coffee sector. Young people rather prefer to study or work in the cities. Young people leaving the villages has substantial consequences for their parents. In several FGDs, cooperative members expressed their sadness over the fact that they now live alone with their children being far.

³² It's a parasite disease, whose spread has been accelerated by climate change. For further reference, please see the following [Link](#).

³³ Formerly, delegates were assigned for each region, but these now have been replaced by steering committees.

As shown later on in the quantitative results, this trend was also reflected in their perception of their social situation.

All non-FT cooperatives visited did not yet count with a more elaborated institutional structure. Assemblies were taken rather informally, bringing together the producers in the village school to discuss next steps of the cooperative. A director of a non-FT cooperative complained that participation is often very low and not all members are active. Indeed, a sense of belonging to the cooperative could not be clearly noticed among non-FT farmers. There is the conviction that the village needs their own association to improve their situation, but no formal structures of participation are built yet. An independent farmer, who counted with good education, expressed her wish to engage in an association to work towards better conditions in the coffee sector, but lacked knowledge on opportunities, since she was not member of any association.

4.2.4. Cotton Case Study

Working Conditions and Labor Rights

According to the majority of FGDs, farmers usually work eight to ten hours a day for seven days a week. In the morning and evenings, they take care of their cattle. The fact that the FT PO, with the help of the premium, provides seeds, fertilizer and picks up their harvest directly from their doorstep is of great facilitation to the FT farmers, as they do not have to carry the financial burden of purchasing seeds or transporting their yield to the next market and do not have to spend time for negotiating prices and selling it there. This protects them from exploiting behavior of middle men, which is still reality in most rural agricultural markets. In years of good monsoon rain, farmers can work up to eight months of the year cultivating cotton. The remaining four months, they are not occupied with cotton cultivations, but some migrate for work while some remain in the villages and stay idle. Some non-FT farmers reported that in the harvest season they even have to stay in their fields during the nights, as wild animals often destroy part of their crop if not watched.

The question on prevalence of child-labor is not easy to answer. There is some evidence that throughout the region children support their families during the harvest season from the age of seven to ten on. As reported, schools close in the region at that time to prevent children from missing school. However, this consequently prevents children from having more time to play, engage in extracurricular activities or continue to study³⁴. Indeed, most non-FT farmers confirmed that children support their parents in harvesting activities during vacation. Most FT farmers and the sarpanch (village chief) of FT villages noted that *“they [children] go to school the whole year and only start working in the field from the age of 17 on”*. Single FT farmers mentioned that children, from the age of 13 on, indeed, support the harvesting during their school holidays or on weekends. A doctor of a village with both FT and non-FT farmers has made the following observation:

“Children attend school but they start working on the farms from the age of 12-13 years. They don’t work on the farms below the age of 10 years. Only in exceptional cases when the work is too much for their parents to wind up by themselves, children also work on the farms. Children work for about 2-3 hours in those cases. But their performance in school definitely gets affected when they work on the farms.” (CI, doctor)

³⁴ The ILO provides an internationally acknowledged definition on the “acceptable and unacceptable” [here](#).

While the worst form of child labor, such as hazardous labor or exploitative or abusive child labor can possibly be ruled out, further investigation is deemed necessary to assess to what extent children of Fairtrade farmers support their parents on their farms in the region and at what ages. FT farmers interviewed, interviewed in the presence of CPO management, and most probably did not feel comfortable to reveal actual practices for fear of negative consequences. This research did identify that at least one training on child labor was provided to FT farmers and most of them showed better awareness stating that this is not a good practice.

Very limited information was provided on working conditions of seasonal laborers. Apparently, they come from neighboring villages and earn between 200 and 250 INR per day with women receiving less than men. Their children can attend government schools in the villages. Benefits from the FT organization or any other supporting entity do not reach them. While this is no criterium under the current CP standard, the topic of worker benefits is, indeed, discussed during the current SPO-review.

Education

In general, farmers above the age of 40 across the villages are characterized by low education and it is estimated that 40% of farmers are illiterate. Despite low economic power, most parents urge their children to finish primary school. Across all villages (both FT and non-FT certified) farmers confirmed that every child attends school and completes primary schooling, as it is free of costs in government schools. Free meals, books and uniforms are additional incentives for parents to send their children to school. In each village visited, both FT and non-FT, there was a government primary school, but only in two villages a secondary school was found.

While school infrastructure was entirely built by the government, the FT CPO has supported single village schools around Chotila through marginal investments financed by the premium. For instance, the school in Lakchokiya received a water filter and tank. In other villages, farmers mentioned that the FT organization is providing scholarships for their children, especially girls. Indeed, as published on their website and confirmed by their management, the FT CPO has a specific initiative to tackle the gender gap in education by mentoring and supporting the academically brightest girls to access higher education. They finance yearly scholarships, ranging from 1500 to 2000 INR per person. As reported 551 girls have been mentored so far, but none of the FGD participants' children had accessed these scholarships. Schools visited in the comparison villages have similar infrastructure established by the government, but do not receive any additional support.

As per several FGDs, there appears to be an increase in awareness on the importance of education among FT farmers. It could be found that approximately half of FT farmers put serious efforts into educating their children and encouraging them to attend higher education in the town of Chotila. Consequently, children have to move away from their villages to acquire their desired education. According to FT farmers, their children's aspiration is to have white-collar jobs in the cities rather than working as farmers. One case was reported in a FT village where parents took up a loan to enable their son to study medicine. Yet, this does not hold true for all villagers, as some parents do not want their children to move away, leaving for them only the opportunity to engage in farming as well. Furthermore, gender bias is still prevalent in the region, as even in villages of FT farmers it was mentioned that some girls sometimes have less opportunities to pursue higher education due to traditional household roles.

The same level of awareness could not be found in comparison villages. While children, in general, complete primary school, they do not continue into secondary school, because their families cannot afford to pay. According to two community interviews in non-FT villages, 80%-90% of youth continue to work in farming. A non-FT farmer mentioned:

“Only one out of hundred children in the village continue to study after 10th grade. Everyone is very poor. Nobody from this village ever had a formal job.” (Male farmer, Non-Ft, COTTON_FGD_13)

Besides few scholarships, the FT CPO has not made any significant contribution to improve education in the villages. Yet, the situation in non-FT villages was found to be even more depressing. As mentioned children of non-FT villages seem to support their parents in the field in an intense manner, which additionally impacts the education of younger generations.

Regarding trainings and capacity building, male FT farmers confirmed that trainings are regularly held and comprise topics of seed use, technology and the production of organic fertilizers. Further trainings include Fairtrade standards and premium use as well as environmental protection. According to the FGDs, all farmers attend trainings, while the FT management reveals that attendance often is an issue, summing up non-attendance of up to 30%. While the website of the FT CPO states that, among others, trainings on women’s participation and self-help group development are given³⁵, no evidence could be found in the FGDs in this regard. Most of the FGD participants urged for an increase in trainings for youth to enable better opportunities beyond farming.

Gender

Most of the villages studied expressed that there is no discrimination against girls / women as far as education and work is concerned. However, some respondents revealed that more girls drop out of school after primary education than boys, because they have to do household chores, fetch water and look after their siblings while their parents are out on the fields. Many girls are still married at a young age, impeding them to pursue higher education outside the villages. It was reported that most women take care of the household, the cattle and children or help out on the cotton fields, doing the lighter work of weeding, planting, picking cotton. In the FT villages, according to a FGD with male farmers, 20-30% of women of their village work as teacher or in an NGO, while almost no formal jobs or leadership positions for women were identified in non-FT villages in the sample. One FT village is famous for their *Bangle* (arm bracelet) production, where mostly women are involved. By managing this business, women contribute to the family income, which also enlarges their negotiating power within their households. While in FT villages both women and men have bank accounts, in most of the non-FT villages only men possess an account. The research team could also observe that during FGDs FT female participants, partially, showed more self-confidence and were better informed about production costs than non-FT members. A village chief in the non-FT setting revealed that conservative mindsets still prevail in his village, impeding women, for instance, to go out of the village by themselves.

It was revealed that women never take part in trainings given by the organization. Reasons for the same mentioned include their shyness and lack of understanding due to low levels of education. Their level of participation and engagement in the organizational structures of the FT organization is,

³⁵ Please also refer to PO#4’s [Homepage](#) for further information on their social activities.

thus, substantially lower compared to the men of the villages. Management level at the FT PO does not count any women either.

Most villages studied denied the prevalence of socially backward practices such as dowry or child marriage, but doubts remain. At the same time, leadership positions, neither in the villages nor in the FT CPO, were occupied by a woman, except for one case. In the non-FT village of Anandpur, a woman has been village chief at the moment of data collection. Similarly, no woman is, at the moment, part of the PEB, but the FT management emphasized their willingness to work towards the proposed quota of women inclusion in the PEB of up to 20%. According to most FGDs in FT and non-FT settings, gender equality is slowly improving. However, changes are rather contributed to government initiatives than any other actor.

Health and Safety

Most common diseases in all of these villages were reported to be common cold, cough, fever, and skin diseases. Tuberculosis is still prevalent in the region, but numbers have decreased by 30% in recent years. Dengue and Malaria occur, especially during the monsoon season. According to a village chief, malnutrition levels are still cause of concern and hunger emerges in times of droughts, but compared to five years ago, when there was a famine in the area, the situation has improved.

All villages included in the study count primary government healthcare services and an Accredited Social Health Activist (ASHA) - a woman resident of the village who is trained to be an interface between the community and the public health system. An ASHA worker is primarily responsible for delivering first-contact healthcare, creating awareness on good healthcare practices and safety, counselling women during pregnancy for birth preparation and so on. Several health campaigns are held per year. According to most FT and non-FT farmers, family planning has improved in the region, reducing the total number of children and health risks per female. Nowadays, pregnant women deliver their child in the town's hospital. They furthermore benefit from the Janani Suraksha Yojana (JSY) scheme of the government³⁶, providing 6000 INR to pregnant women. A government scheme promoted sanitation, but, nevertheless, on average only between 10%-30% of villagers count with their own toilet.

While access to health care is given through these governmental institutions, many farmers complained that their services are often not sufficient, as either the doctor is unavailable or quality concerns in terms of cleanliness or provision of medicine is not guaranteed. For emergencies or more complicated health care cases, they are required to travel to the town of Chotila. Recently, an ambulance service has been introduced to facilitate the transfer to hospitals, which is appreciated by all villagers. Most farmers do not count with private health insurance, but, recently, acquired the *Mukhyamatri Amrutam Yojana (MA Amrutam) Card*³⁷, issued by the government, which allows them

³⁶ It is a safe motherhood intervention by the government under its National Rural Health Mission (NRHM). Under this scheme the government provides a sum of 6000 INR to pregnant women. The main objective of the scheme is to minimise neo-natal and maternal mortality by promoting institutional deliveries.

³⁷ The Government launched the *MA Amrutam* in 2012 in order to provide tertiary care treatment to the Below Poverty Line (BPL) population and to families with or lower than an income of 2.50 Lakh per annum. They receive an assured sum of 2 lakh INR per family per annum to treat catastrophic illnesses such as cancer, cardiovascular and neurological diseases, major burns, neo-natal diseases etc. This is a 100% state funded scheme.

free medical treatment up to 200,000 INR in public institutions. In one FT village 10-15% of farmer recently applied for health insurance.

The research team did not find evidence that the FT organization had supported health facilities in the last years. Recent improvements in health levels can be mostly attributed to government initiatives. However, some farmers stated that the FT CPO facilitates the application to existing government schemes, thus enabling their farmers to obtain government benefits easier and faster.

Participation

As mentioned above, the cotton farmers included in this study are integrated into the FT system under the Contract Production Standard. As per FT understanding, contract production is a set-up which involves small producers who don't have a formal structure or a legal status yet. By partnering and setting up contracts with an intermediary organization (e.g. an enterprise, NGO or exporter), called Promoting Body, who holds FT certification, they can leverage FT benefits. However, this should be an interim set-up, pursuing the final aim of becoming autonomous over time and turning into a generic FT SPO. According to management interviews, from March 2018 on, approved by FLO, the CP set-up will end and be upgraded to a SPO.

Smallholder farmers under CP are represented by the Producer Executive Body (PEB)³⁸, which is elected by all farmers. Discussion making processes are made as follows: Several FT FGDs confirmed that in each village monthly meetings are set up by PEB representatives. Members of the PEB collect information about development needs and requests of villagers to communicate them to the CPO management. Every month there is a PEB meeting, where requests are put forward accordingly. The need assessments list is handed over to the Producer Organization (PO) which represents FT farmers of several villages (one PO has about 5,300 members) and comprises representatives. The PO evaluates and ranks projects by necessities and importance. Based on this outcome, PO#4 conducts needs assessments on the highest rated projects and has the power to veto potential projects based on the assessments. During the PO's Annual General Meeting (AGM), a final decision based on the outcomes of the two processes is made. With the new organizational set-up, which is about to be launched, the SPO will be independent and the sole administer of the premium.

FT male farmers confirmed that there is a good relation with the FT producer organization and that they are able to articulate their views during the meeting:

“Yes, we have good understanding with P.O. and when we go to meetings together and decide all the things there, only then does he act, after taking our opinion into consideration.” (Key Informant Interview, worker representative, FT)

Discussions that arise, mostly center around the investment of the premium, since some farmers would like to use it to increase personal benefits for farmers who are part of the organization instead of investing it on a community level.

³⁸ A PEB, in the context of contract production, comprises elected representatives of the individual contracted producers. The PEB is the intermediary between the individual producers and the promoting body. It also represents the producers' interests and ensures that the Fairtrade Premium is handled properly. Please also refer for more details to <https://www.flocert.net/glossary/producer-executive-body/>

In contrast to other case studies, young cotton farmers rather stay back in their villages and participate in the organizational meetings and activities, such as festivals or development work within the village. However, women do not participate equally as men. Confirmed by several FGDs and community interviews, as of now women do not take part at all in monthly meetings, neither do they participate in trainings. According to FGDs with female producers, “women are not attending meetings because they are unable to understand what is being said.” Several years back, there was a woman saving group of twelve women in one village, whose activities have now stopped. The only way they have recently been included, was when photographs of females were taken for a book publication. No woman is representing the farmers in the PEB with all 49 members being male. Apparently, the CPO is working towards having 10-12 female representatives. In the new SPO structure, at least one out of five board members must be female.

Another effect that arises out of the activities of the PEB is an increase in the reputation of FT cotton farmers in the respective villages. Through investments in community infrastructure (such as constructing boreholes, water storages, or irrigation systems) which are accessible to all village residents, FT farmers get credit for doing something for the community which enhances their social status within the villages.

Non-FT farmers mentioned that they do not engage in any union or institution and barely receive training, except a one-time training by the government. They further stated that they do not access government farming schemes and money borrowing is only done within in the village and not by approaching credit institutions.

4.2.5. Flowers Case Study

Working Conditions and Labor Rights

Since 2009, Fairtrade requires farms operating under the HL Standard to allow for unions and to negotiate the terms and conditions (including wages) of its workers in a process of collective bargaining. This requirement, together with the traditionally strong role of Kenyan unions has led to a strong position of the workers’ union at PO#5a. Through the Collective Bargaining Agreements, wages were set slightly above the national minimum wage (see income section) and more than 80% of workers were reported to be member of a union. Participants of the FGDs expressed a great appreciation for the presence of the union (Kenyan Plantation and Agricultural Workers Union). Workers expressed a high confidence in the ability of unions to improve working relations and worker’s rights.

The workers at PO#5a were generally very aware of their rights (workers work 8 hours from Monday to Friday and 6 hours on Saturday, amounting to 46 hours weekly; overtime is paid 150%). The majority of workers work on a permanent contract but there are casual workers with a probation period of six months as well. About two out of five workers are retained as permanent workers, which was considered a comparably high share by both workers and management. Workers who have started working with PO#5a less than five years ago are entitled to 24 days of paid annual leave, workers who stayed for a longer period of time receive 26 days. Sick leave is granted for 55 days per years with full pay, afterwards it is reduced to half pay. On the issue of child labour, the farm only employs adults (18 years and above) who have completed their secondary education. Many workers in the group discussions mentioned that working conditions had never been an issue at PO#5a. Workers, farm management as well as interviewed community members confirmed the good

reputation of PO#5a in terms of working conditions. Nevertheless, farm management expressed some concerns about the increased role of the union at PO#5a. According to them, the union had overstepped its mandate in several cases and wanted to be involved in all activities ranging from the funeral committee to the saving groups. Above all, they felt that the union was trying to turn workers against the farms by promising workers too much.

Comparing this to the accounts of workers in the comparison group, working conditions in terms of working time, paid leave, and excluding minors from working on the farms were quite similar. FGDs revealed that non-FT workers were also well aware of their rights, as the comparison farm also has a union to ensure and promote worker's rights. Based on FGDs in both groups, the research team gained the impression however that the FT union was better institutionalized and had set up better structures to negotiate with the management than the non-FT workers' union.

Over the past 5 years, the role of workers' unions has grown continuously and replaced the former workers committee which used to discuss workers' issues with the management. Since 2014 the Freedom of Association Protocol has to be adhered to by all POs under the HL-Standard. During the FGDs, workers mentioned that freedom of expression and freedom of participation had increased significantly and that job security had improved through the presence of unions as it was much more difficult to lose one's job nowadays. Workers also expressed that their consultation during decision-making processes had increased and that dispute resolution between workers and management had improved. Workers feel more respected and heard compared to five years ago. Union representatives themselves confirmed that their role had grown tremendously over the past five years, in 2011, during the first study, they were still very new and had just received a few trainings.

Education

Even though Kenya offers free universal primary education, parents characterized the quality of public education as rather low (e.g. student teacher ratios between 55:1 and 60:1 in public schools). Helping parents (workers at PO#5a as well as community members) with the educational costs of their children is PEMA's main field of activity. PEMA directs a large proportion of the Fairtrade Premium into a bursary scheme targeting needy but high performing students. Bursaries are offered for secondary as well as higher education and vary between 60,000 and 10,000 KES. Full scholarships are being awarded to the three best students of FT workers' children and the three best students of the community. If there is a surplus of the Fairtrade premium, it will be spent on additional bursaries for workers' children. Bursaries for higher education are being awarded to successful students (children of FT workers as well as community members) of the secondary education bursary scheme. Lastly, a small number of bursaries is also given to children with special needs. There is however a wide disagreement between workers and the farm management in regards of who should benefit from the educational activities. Many workers (though not all) repeatedly argued that children of workers should come first while the management stressed the importance of giving bursaries to high performing children from the wider community.

Besides the bursary offered by PEMA, parents at the FT farm also have access to educational loans by the companies saving group. Through these support mechanisms, most parents at PO#5a reported that their children were able to finish their secondary education and several parents were also able to send their children to college or university. PEMA also supports 17 public schools in the communities surrounding its farms near Juja and Thika through infrastructure development. Through

the construction of new toilets, PEMA had also supported the local school itself by constructing new sanitary facilities, a new classroom and the planting of trees. The FT farm also offers capacity-building trainings to its own workers (such as catering, hair dressing, driving, and computer courses) which are subsidized by the premium. Workers who had attended these in-house trainings reported that they were able to use some of the skills to make an extra income. In some cases, the trainings had also helped workers to move on to higher positions, though some workers also complained that despite the trainings qualifying for a certain position (such as driving), management had decided to recruit people from the outside. Children of FT workers' families were regarded as being better off than children from other parents as they are wearing better clothes and are able to pay fees for exams on time. The non-FT farm only provides a very few scholarships to its own workers' children. There are no scholarship schemes for other community members. As the assistance of the comparison farm is very limited, most parents depend on support from education funds of the Constituency Development Fund (CDF)³⁹, the county government or loans from other Savings and Credit Cooperatives (SACCOs). It was estimated that three out of five kids of non-FT workers would move on to High School. The farm also doesn't offer any capacity-building workshops to its workers but it offers transport services for children of the nearest orphanage to school.

Parents attested that educational opportunities in the region had increased over the past years but they still struggled to guarantee their children a quality education. PO#5a continued to prioritize education in the allocation of the FT premium which was equally appreciated by parents, community members as well as educational stakeholders in the region. Tensions between workers and management regarding to who should profit from the bursaries had increased slightly during the last years as many workers would like to dedicate the greatest (or the whole) share of bursary spending to children of workers at PO#5a.

Gender

Adhering to national labour law, a number of measures regarding non-discrimination of women and maternity leave are in effect at the FT farm visited for this case study. Female workers are granted three months of paid maternity leave and fathers receive paternity leave for two weeks upon the presentation of a birth notification. Pregnant women will also be given lighter work duties. Breastfeeding women are allowed to leave work an hour earlier and the farm also built rooms for breastfeeding at their premises. Gender committee at all three farms are responsible for overseeing the farm's gender policies and dealing with related concerns including cases of sexual harassment. The gender committee get together four times a year during working hours to receive trainings and coordinate their activities. The committee also conduct gender trainings for workers employed by the farms. Every new worker entering the farms will be trained on the protocols regarding gender issues during a two hours training. There were only relatively limited accounts of sexual harassment (e.g. supervisors would abuse their power and harass female workers). Seasonal workers are generally the most vulnerable. In the event that a sexual harassment case is reported, defined protocols are in place (e.g. the gender committee is responsible for starting investigations of the case, involving farm management on decisions in more severe cases).

³⁹ The CDF is a program by the Kenyan government to channel funds to support constituency-level, grass-root development projects across the country.

Most FGD participants and members of the gender committee expressed that they hadn't experienced discrimination due to their gender and that it was equally possible for women and men to be promoted to supervisor positions. By farm policy, a pair of supervisor and assistant supervisor always needs to be of the opposite sex, so every female/male supervisor will have a male/female assistant supervisor. However, it is more likely to find a pair of male supervisor and female assistant supervisor (with about 60% of male and 40% of female supervisors) despite a majority of the workers at PO#5a being female. Furthermore, there are no differences in payment for equal work between men and women.

Contrasting these observations with the insights from FGDs at the comparison farm, no major differences regarding maternity leave, payment or gender committees could be detected. Furthermore, FGD participants and members of the gender committee confirmed that the gender committee's role has increased a lot over the past five years as a result of trainings and seminars. Also, five years ago, there were hardly any female supervisors, but a change in the company policy has brought women into supervisor positions.

Health and Safety

In terms of access to medical services and implementation of safety measures at the workplace, it was reported that medical services are provided in each of the FT farm's three locations (clinic with laboratory, a small pharmacy, a trained nurse, lab technician, and a clinical officer). A doctor is present two days per week, rotating between the three different farms. Common cases that are being treated at the clinics include minor cuts, heat exhaustion and clinical malaria, flu, chest and stomach problems, and headaches. Cases that cannot be handled by the clinics are referred to hospitals in Thika town. As medical checks are required by national law as well as the Fairtrade HL standard, all workers undergo annual health tests and are also vaccinated against Hepatitis C. All FT workers are also covered by the National Health Insurance Fund (NHIF) and this also applies to the seasonal workers. One of the primary concerns of the workers was that the health insurance scheme did not cover the employee's spouse and children. Through PEMA, the PO#5a Fairtrade Body, PO#5a also provided some health and security services to the neighbouring community (typhoid vaccination, medical supply for local dispensary, tuberculosis project).

Besides, the FT farm has an Occupational Health and Safety Committee. The committee carries out risk inspections and refers the results to the Safety Officer for follow-up actions. Workers at the FT farm are provided with appropriate Personal Protective Equipment (PPE) for their different tasks and regular check-ups ensure that they adhere to the PPE regulations. Common work accidents are cut fingers and fainting in the green houses due to hot temperatures. Some of the workers had received training in First Aid. As roses need to be sprayed intensively to fulfil requirements by export markets, sprayers are trained on the correct use of their PPEs and compliance is monitored strictly. According to workers and management, working safeguards such as the provision of appropriate PPEs is often ignored by other farms. FT forbids the use of WHO class one chemicals, and class two pesticides and chemicals are only used at night in the greenhouses to prevent workers' exposure to the same. Furthermore, the current FT HML for conventional production is the most extensive blacklist, which was substantially brought about by previous excessive pesticide use in flower farming. Sprayers also undergo quarterly regular check-ups to monitor key health indicators. If their values rise to a critical level, a worker will be transferred to another department.

Comparing this situation to the reports from the non-FT farm it could be observed that workers at the comparison farm also benefited from an equally staffed clinic that treated minor cuts and illnesses and heat exhaustion. Employees at the non-FT farm are also covered by the national health insurance as well as a private insurance with extended medical cover-up which was rated as a great improvement during non-FT FGDs. As the production process at the comparison farm does not require equally harmful chemicals as the roses grown at the FT farm, a direct comparison in the use and handling of agrochemicals between the two different farms was not possible. However, the comparison farm does take precautionary measures (e.g. maintaining buffer zones) when spraying less harmful chemicals.

Staffing at the clinics had been increased and some medical services that workers had to pay for five years ago are now being provided for free at the clinic. In line with the national trend of a strong decrease in new HIV infections, there has also been a strong decline of new infections around Thika and Juja. Through continuing, awareness raising and testing activities on World AIDS Day, PO#5a attempts to reduce the stigma regarding HIV/AIDS.

Participation

PEMA, the FT farm's body that manages and allocates the Fairtrade premium spending, is the main institution through which farm representatives participate in rural development activities (see also gender, health, and infrastructure). The FT farm has one community coordinator who liaises with community members and visits and monitors its projects in the community. Besides investments in infrastructure, health and education, PEMA organizes a number of community events such as football tournaments, marathons, and field events. It is run by representatives from the workers and the management (with the latter not being able to vote, just to veto) and has 20 committee members who are working in four different sub-committees (day care, bursary, school development, and home development sub-committees). PEMA elections take place every two years. Committee members are elected by the workers but can be retained by the management. They are responsible for managing the Fairtrade Premium (10% premium on sales under Fairtrade).

PEMA committee members collect project proposals (such as subsidized lunches, bursaries, capacity building measures, health services to the community, micro finance schemes, public school development) from the workers for the premium spending. Based on the suggestions by the workers, it compiles a list with prioritized projects that are complemented by projects brought forward by the community. Management and PEMA members meet during the Annual General meeting (AGM) to prioritize projects in accordance with Fairtrade Standards. 90% of implemented projects should stem from workers suggestions, the remaining 10% should be project ideas forwarded by the community and other external institutions.

A persisting considerable challenge (which was also mentioned in the previous study) evolved around the question of who should benefit from the Fairtrade Premium. Workers often claimed that they feel that priority is not given to workers and that the community is benefitting more. Union representatives also claimed that the farm management influenced decision-making processes and that the probability to get re-elected to the committee also depended on someone's relation with the management. By contrast PEMA committee members described their relationship with the management as good and based on mutual trust but mentioned the challenge that the premium was slightly decreasing because of lower Fairtrade sales. The management questioned whether the

workers understood the core values and concepts of the Fairtrade Premium. They expressed that workers seemed to have lost track of the local communities and regarded the premium as a personal extra income. In some cases, the accountant had even refused to sign projects for these reasons. Activities carried out with the community were regarded as very beneficial by the community members as they saw a positive impact on community cohesion and creating opportunities for social participation for youths.

At the non-FT farm, there is no comparative body engaging workers. Some of the women reported in FGDs that they were involved in community activities such as church groups or *chamas* (informal investment groups) but this took place on an individual level and was not encouraged by the company. According to interviewed community members, there are only few companies which are engaging with the community even though they are requested to do so by CSR measures. Other examples that were occasionally mentioned included largely bursaries or infrastructure investments by three other FT-certified farms in the area (Zero Roses, Simbi Roses and Zena Roses). Other community development activities are rather supported by the CDF, a local university or by (local) NGO initiatives.

4.2.6. Tea Case Study

Working Conditions and Labor Rights

There are two different kinds of positions in the tea gardens: (1) clerical and technical positions, and (2) field workers. While clerical and technical positions are filled via normal recruitment processes, field worker positions are passed on through blood relations. Participants of the FGDs confirmed that the farm maintained good working standards and they repeatedly expressed satisfaction with the current management. Wages and rations were usually received on time. Paid overtime was only granted to workers in the factory and not to tea pickers. For four hours of overtime, factory workers receive a full day of paid leave. There is a child labor policy at all tea gardens, which stipulates that no child will be involved in tea production and this policy is reportedly to be followed strictly. Workers usually start around the age of 25, the maximum entrance age is 30 years. Nevertheless, as both parents are often working, children may end up carrying out a significant amount of housework work, including taking care of younger siblings and preparing meals. This indirect contribution by children to house work or caring for their young siblings could be explored further.

Workers are well represented by different unions who also hold affiliations to the main political parties in the region. They frequently interact with workers from the tea gardens, by setting up meetings every three months. Workers share their grievances or complaints with the union representatives who then take the issues forward to the management. The unions also participate in the hiring processes of open staff positions. Relations between unions, workers and the management were constructive and based on mutual respect. Nevertheless, the most important issue – increasing the salaries of workers and introducing a minimum wage for the tea industry has not been resolved. For the past 4-5 years, the unions had been advocating for a minimum wage of at least 270 INR in the tea sector⁴⁰ but so far, the government had been reluctant to their requests. According to them, a

⁴⁰ The research team interviewed representatives of one of the trade unions at PO#6 who were very vocal about the low and unsustainable salary of the tea workers and argued that the salary should be increased from 132.5 to up to 300 to 400 INR a day, which is, apparently, a common salary in other industries.

committee under the government of West Bengal had been formed several years ago to calculate a minimum wage for workers in the tea industry but has not yet presented any results.

Education

Workers at PO#6 had mostly passed grade six to eight though some also had completed secondary school, while administrative staff and officers had at least completed secondary school and many had also pursued higher education. Parents place a great importance on their children's education, hoping that they will be able to find a better job outside the tea gardens instead of being forced to step into their parents' footsteps. All participants of the FGDs indicated that their children were currently attending or had already completed at least secondary school. While the government provides universal free primary education and tuition fees for higher education are also quite low, workers prefer sending their children to private schools, as they promise better quality education. According to the interviews, girls and boys receive the same amount of education.

The Darjeeling Tea Association, a trade association, is statutorily responsible to provide scholarships to children of tea garden workers. Some scholarships for secondary education are also financed by the FT premium. In addition, a local NGO claimed to provide scholarships. However, the majority of workers who had participated in the FGDs were unaware of such scholarship options. The only scholarship that workers were, indeed, aware of was a marginal government scholarship, to which many workers do not apply though since the sum is very little. Furthermore, it is directly transferred to a bank account, to which workers barely have access. During the FGDs, the research team did not meet any worker whose child currently received a scholarship, however, representatives of the FPC assured that they knew the stipends of their villages. During the FGDs some of the workers argued that the caste system might have an influence on deciding who gets one of the very few scholarships. According to them, workers of lower castes usually do not receive any, while higher castes might be rewarded with scholarships. Discrimination based on caste seemed to be operational in deciding who can access scholarships. Participants of the FGD repeatedly expressed the wish for more scholarships being provided by either the company management or via the FT premium.

On the premises of the PO#6 farm, there are two private and three government primary schools spread across five villages. There is no secondary school at the tea garden and only one government secondary school in the closer environment. If the parents send their children to secondary or higher education outside the farm, they must also provide for their transport and accommodation. For this reason, most of the parents send their children to the government high school, which is about eight km away from the villages of PO#6. A high school teacher reported that around 80-90% of his students were transitioning to college, especially in the cities of Darjeeling or Merik.

Indeed, due to better education levels, young people start looking for job opportunities outside of their villages, which are quite limited in the region though, or migrate to larger cities in India or Nepal or even to other countries such as the Gulf states or Afghanistan with the prospects of higher salaries. A union representative estimated, that only a 40% of the young people between 18 and 30 starts working on the farms while about a 60% looks for jobs elsewhere. The risks of out migration in the tea garden estates are thus quite high as one teacher expressed:

“If all youths migrated to another place, this place would be destroyed. One day will come when all youths have left and this will stop the development of this region.” (Union representative, FT, CI_TEA)

Trainings are conducted regularly and workers who are new to a tea garden receive an induction training to learn how to cultivate, pluck and apply fertilizers and pesticides⁴¹. Workers also receive regular trainings on health and safety, first aid and hygiene as well as on environmental protection and deforestation. However, there are hardly any opportunities to receive trainings for further professional development. Some female participants of the PO#6 FGDs mentioned that some male workers had also received driving trainings, who had then been employed by PO#6 itself.

Gender

Most workers were female with a ratio of female and male workers of 80:20 at PO#6. The unequal ratio results from the fact that most men prefer to find jobs outside of the tea gardens awaiting higher salaries. Subsequently, women are often left doing the less-well regarded and arduous work in the tea gardens, which they are still willing to accept due to the provision of accommodation. According to FGD members, this is important for reproductive work such as providing shelter to the family, raising children, looking after in-laws and running a household. There is no gender pay gap. In line with national law, women receive three months of paid maternity leave starting during or after their 8th month of pregnancy.

Workers are separated into men and women working groups. One group of women is exclusively for those who are either pregnant or have infant or disabled children who they carry to work. Women in this group are being given lighter tasks while they are still being paid the same wage. However, having to expose their kids to the rainy seasons and breastfeeding their kids in the tea garden was still considered highly challenging by many female workers. During FGDs, women lamented the lack of toilets at the tea gardens.

Women also mentioned that, since 2011, they could also get promoted as supervisors and earn a slightly higher daily salary. However, at present, there were only five female supervisors but 12-13 male supervisors at PO#6, which stands in stark contrast to the large number of women working at the tea garden. The FPC has an anti-sexual harassment sub-committee; however, it appeared to be inactive and no members of the sub-committee could be interviewed. Participants of the FGDs found that sexual harassment during work was not an issue, but they did not know of any procedures or contact persons to turn to in those cases. Community members and teachers at PO#6 had also not heard of any cases of sexual harassment at the tea gardens, but domestic violence and alcohol abuse seems to occur in the region. During the FGD discussion with male participants, concerns were raised about the workload being assigned to women. Women must complete the same targets as men, even though these were found to be quite high as they hardly managed to achieve the targets themselves. The men also recognized women's double-burden of work, as they have to take care of household duties.

Starting in 2014, the Asian and Pacific FT network NAPP has undertaken several steps to strengthen the role of women in the tea gardens by conducting a series of gender sensitization and female leadership programs for female workers. For example, in 2015, women of several FT tea farms were invited to participate in a training, which involved topics such as decision-making, strengthening self-

⁴¹ On non-organic farms only

confidence, and buildup of skills to actively participate in the FPCs. More activities are planned throughout the year 2018 targeting workers as well as management.

While FT may not yet have a direct impact on the working conditions of female workers, it does have an impact on the gender relations as more women learn to organize themselves in the FT Premium Committees and express their demands in a collective manner. Women are at least equally engaged as men in the committees, which to some extent contributes to their empowerment in a largely male-dominated society. Representatives of the management (which consists only of men) also attested that women's confidence had increased over the past years and that they are more vocal to express their opinions and needs.

Health and Safety

Workers receive ten days of annual winter leave and in case of sickness, workers are granted 14 days of paid leave but if they are sick for a longer time, they do not receive any salary. There is no medical or injury insurances for tea workers, but, as decided by the FPC, they get reimbursed for advanced medical treatments of severe injuries or sicknesses, financed by the FT premium. Management staff members of the tea gardens count with general health insurance. According to health personnel interviewed, the most common injuries that workers face are minor cuts, sprains, broken legs and hands caused from tumbling down the steep hills, snake and leech bites, and major cuts during the pruning season. The government runs vaccination programs and provides medication for cases of tuberculosis with the latter being rather rare over the past years. In every group of tea workers there is a first aid box to be able to immediately respond to accidents occurring in the tea garden. Medical services provided at PO#6 are rather limited. There is one dispensary at PO#6 with some of the equipment of the dispensary being financed through the FT premium. Personnel in the dispensary received trainings by a doctor who used to come twice a month but stopped coming in April 2017. In the case of any emergencies or serious injuries and illnesses, workers need to travel to the hospitals in the cities of Sukhia Pokhari or Darjeeling, which takes at least 1.5 hours by vehicle, whose availability cannot always be guaranteed. Workers also criticized that they had to pay the expenses for hospital treatment in advance and would only be later reimbursed by the company with a delay of up to a month.

Spraying is carried out at minimal level under organic standards and workers receive trainings on spraying techniques, safety precautions, and wearing of appropriate PPE. Some of the workers of the FGDs mentioned that the expected daily workload was quite heavy and that it was difficult to fulfil those daily requirements. Before organic certification, workers used to spray more harmful insecticides that caused eye and skin irritations. During the FGDs, almost all workers mentioned the need of an ambulance, and were very vocal about their wish to finance an ambulance with the revenue of the FT premium. As the same issue was reported in the previous study, the issue was brought up during discussions with representatives of the management, who reported that each tea company is mandated to provide a vehicle for medical emergencies, which must not necessarily be an ambulance. While they do provide a conventional vehicle, workers complained that the vehicle serves multiple purposes and, thus, often is not available when required for medical transfers.

Participation

The FT Premium Committee is the body that is responsible for undertaking discussions around the allocation of the FT premium resources. Each farm has its own FPC and its members are typically

elected by the workers of each tea garden. Representatives include an equal share of male and female tea workers as well as the management, of which two thirds are replaced every three years. The FPC meets quarterly to discuss the spending of the premium according to the needs of the communities and the workers. Every six months, elected representatives of each local FPC meet for the so-called Central Committee to exchange information and discussion points. Based on discussions with other Central Committee members, they decide which activities should be taken up. During the Annual General Meeting (AGM) in Kolkata, decisions are taken regarding the actual allocation of the FT premium by representatives of the local FPCs and the management of the mother company. Even though revenues generated through the FT premium vary between the 13 tea gardens of the mother company, the total amount of the FT premium is distributed evenly between the gardens, meaning that PO#6 receives the same amount as the other 12 sub-farms. Even though the actual revenue of the FT premium is comparably small to the other cases presented in this study, workers nevertheless expressed a high appreciation for FT and assigned a great importance to the fact that their garden was FT-certified.

PO#6 workers expressed some dissatisfaction with the decision-making process regarding the FT premium projects stating that *“only the small things are being fulfilled”*, while more encompassing ideas that have been brought up since several years are often ignored. None of the worker participants of the FGD were fully aware of how final decisions were actually made. Workers expressed that the FT premium money should be used for different purposes such as building roads, installing solar plants, constructing lunch places, improving water supply, education support and buying an ambulance. However, these demands were and could not be sanctioned by the management, as these include services that are compulsory for the management to implement anyways. The FT premium must not be used to cover these costs. It needs to further be examined why the management is not fulfilling these requirements.

Evidence could be found that FT gives responsibility to the workers through the FPC. Before the tea gardens were certified, there was not much community participation across tea plantations. Through their participation in the FPC, at least workers get together regularly to discuss individual as well as community development needs and they need to propose ideas and agree on how the FT premium is allocated. Members of the FPC at PO#6 described that there have been a lot of incremental changes since the committees have been first set up. They mentioned that previously, members had no information, knowledge or awareness of the FT premium whereas today, they are now familiar with the functioning of the committee and are aware of the amount of the premium available. Despite that the management is still perceived as the main decision-maker during the AGM in Kolkata, FCP representative have increased their voice to influence decisions. Nevertheless, the FPC at PO#6 still show considerable weaknesses. In many cases, workers were inexperienced with their roles and not always aware of their responsibilities within the FPC. Thus, the management still had a big influence in the selection of FPC representatives and rejected a lot of proposals put forward by the workers (e.g. purchasing an ambulance). While there may be good reasons to restrict the term of representatives in the FPC to a maximum of three years, the rule also proved to be a big impediment for capacity building of the FPC as workers join the FPC with little experience in self-organization and representation, and only gradually build their skills through engagement in the FPC. This observation was shared by staff who also mentioned that in some cases, the motivation of workers to engage themselves in the committee was also lacking. For these reasons, the management expressed a

strong interest in receiving more trainings and sensitization programs for its workers. Lastly, FT had also brought considerable changes in mind-set on the management side and power relations are slowly, but gradually changing.

Since education levels and economic opportunities of workers are gradually increasing, it becomes more challenging for tea companies to retain their labor supply. According to an expert for FT tea in India, FT is perceived as a threat by some tea companies as it supports the independence and empowerment of the tea workers. In some cases (though not confirmed by the research teams for the case visited), FT faces compliance issues with some tea gardens by restricting workers' meetings. For example, workers may be prevented to gather during working hours or are not granted enough time to interact and make decisions. The shortage of labor is likely to aggravate in the coming 10-15 years, and tea companies find themselves in the challenging situation to maintain FT standards and to guarantee their own profitability and continued existence at the same time.

Before FT entered the tea gardens, the relationship between management and the workers was quite distant. A representative of NAPP attested that he could still feel the differences when he started working with NAPP several years ago and reported that the management is now more aware of listening to the workers and of the need to build better relationships. Previously, workers were often regarded as a threat to the leadership of the company. Management staff also acknowledged that most of them were trained and experienced in business and did usually not have a broad knowledge of designing the kind of social projects that could be financed with the FT premium.

4.2.7. Cross-sectional Findings and Longitudinal Comparison

The following section is structured as follows. Firstly, common findings and differences in respect to the social dimension across the six case studies are described. Secondly, results of the quantitative seed assessment are shown to provide evidence for changes perceived in the social dimension. Eventually, changes over time are compared with main conclusions of the previous study to assess the longitudinal development.

Cross-sectional findings in the social dimension

In the research area of **working conditions** of the SPO/CPO cases, respectively **labor rights** for the HL cases, it could be found that conditions do not differ substantially between all six cases: For the SPO/CPO cases of coffee, cocoa, banana and cotton daily work continues to be a demanding and tiring full-time job, in which, due to the inexistence of pension systems, farmers need to engage as long as their body strength allows them to. They usually work eight to ten hours in their fields. While most SPO/CPO farmers, except cotton, claim to have one day off per week, the majority is not able to go on vacation. In the HL cases of tea and flowers, work is more structured and formalized with stable pay, working hours and allowance of leave/sick days per year. Yet, tea workers do not receive a national minimum wage, but a sector-specific remuneration including to a large extent in-kind benefits (such as housing), stemming from the tea sector regulation framework from colonial times. This is, inter alia, the reason why the tea sector is de facto excluded from the national minimum wage regulation of the Indian agricultural sector. The situation appears outdated but still prevails due to the vested interest of power brokers in the regional economic and political setup. It has for a long time caused dissatisfaction and strikes across the regions, and tea workers struggle to make ends meet due to rising costs of living. All case studies align in terms of strict awareness to the prohibition of child labor, and farmers always referred that child labor is prohibited as per national law and FT

standards. Some doubts remain in the case of FT cotton producers, as during harvest times schools close and some community interviews revealed that children from the age of 12 years on engage in the plucking of cotton. Substantial evidence could be found that children have to support their parents in agricultural activities in non-FT settings, especially in the coffee and cotton case. Here, marginalized farmers in remote areas or of low-economic background and traditional mind-sets hinted that their children need to help out in the fields.

Lastly, one aspect that needs to be mentioned is that SPO cooperatives with a high degree of formalized laborers, i.e. the permanent or temporary personnel that works in processing/ packing/ exporting of produce, showed enhanced institutional stability and strength. Examining the conditions of migrant or seasonal workers, who are often disregarded in the value chain⁴², was beyond the scope of this study. Their situation was not discussed in the 2011/12 study and therefore it could not be referred to a former comparison status (“baseline”). Nevertheless, it could be revealed that, for instance, the strongest banana SPO counts with stable and formalized worker relationships, supporting the overall professionalization along the value chain. In cases where additional labor resources were unstable or caused fractions a deterioration of overall processes was found.

Regarding **education**, it could be found that literacy levels of FT and non-FT members above 50 are very low, with many of them, especially female farmers, only having finished primary schooling. The urge to enable better education to their children was identified across all four countries in the FT setting. Major differences can be found between children of FT and non-FT farmers in terms of higher education. The majority of FT banana, coffee and cocoa farmers and tea and flower workers enable their children to finish secondary schooling, and in some cases, access higher education or vocational trainings. The common aim is to, eventually, pursue white-collared jobs outside of the villages. In contrast, in the case of cotton in India, quality education and better job opportunities for the next generation of both FT and non-FT cotton farmers in the subject region of this study are still cause of concern. In the non-FT coffee setting in Peru, especially in smaller and/or remote annexes, approximately 70% of youth, both female and male, continue to engage in farming activities. Main reasons given were either lack of opportunities, as schools in the villages were shut down or low financial capacities that forced them to support their parents at home. Also, the occurrence of teenage pregnancies and early marriages were quite common in non-FT settings.

On a meta-level, FT farmers/ workers receive more frequent, diverse and intense trainings than the comparison group. Still, gender differences can be found in this regard, since women show less or no attendance, especially in the Indian setting. Across all cases the FT premium is, partially, used to support education initiatives in the respective communities. These comprise smaller investments, e.g. girls’ scholarships and infrastructure support (e.g. canteen or sports ground). The coffee cooperative stands out since it has recently initiated an educational partnership project with the national government to set up a vocational training program. In the case of flower most investments in education could be revealed, where a large range of scholarships and school infrastructure of different villages is financed by the premium. In most cases, the whole community benefits from these investments, as they are not directed exclusively to children of workers or farmers.

⁴² This question is currently debated in the context of the ongoing FT SPO Standard review. The main challenge is how to provide SPO permanent or temporary workers with better wages/living wages, when the farmers themselves do not reach living income levels, since FT sales are yet too low to enable this.

SPO FT and non-FT members in all cases share the same public **health** facilities in their communities and, to a large extent, depend on governmental health insurance. There are severe gaps in the public health system though, since farmers often have to commute long distances and their basic insurance does not provide sufficient coverage of costs. Some FT SPOs support their members by offering additional services, such as complementary cooperative health insurance and mobile clinics (cocoa) or doctors on-site (banana, tea), and all have implemented first aid boxes across their facilities. In the past, public health centers were supported by the FT premium but community stakeholders claimed that this support has either been marginal or has temporarily stopped – especially in times of emergencies (natural disasters or the occurrence of plagues). The flower HL PO shows more engagement in improving health levels. In terms of safety measures to prevent accidents or risks caused by using chemicals, in the cases of cocoa and flowers higher **safety** standards were introduced and trainings given to workers and farmers. Non-FT cooperatives or organizations, except in the comparison group of the flower case, stated to not be in the financial position to provide additional health support to their members.

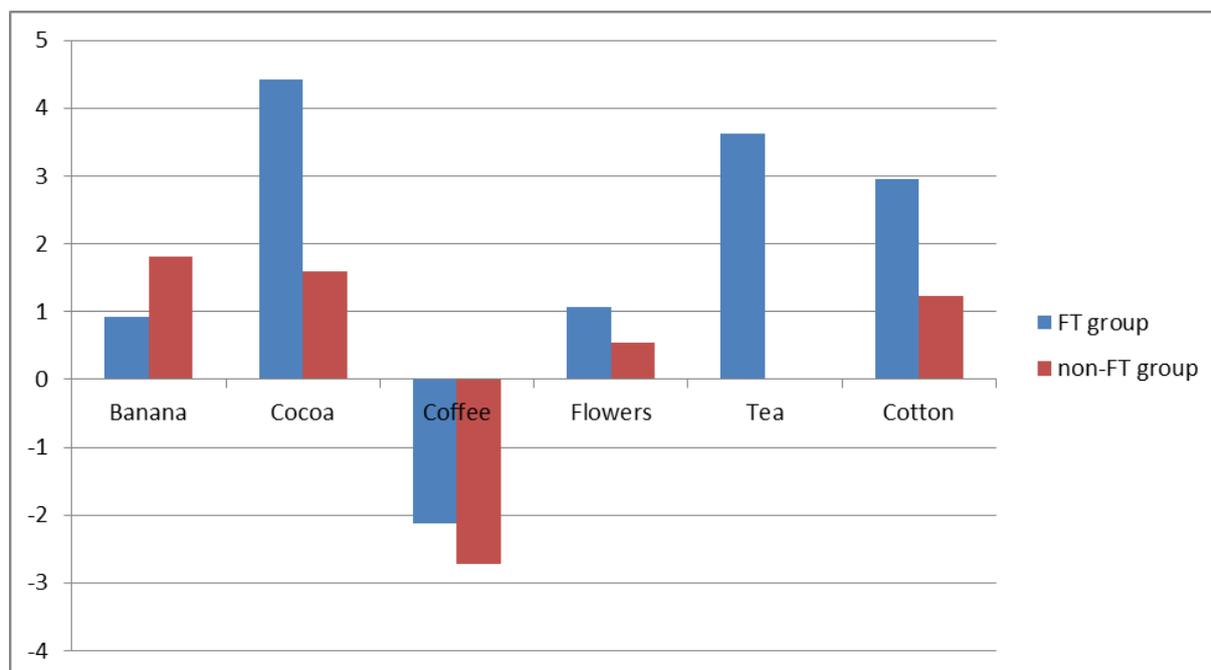
Substantial differences not only across organizations but also geographical regions can be found in regard to **gender** issues, making it difficult to find commonalities across all six cases. For cocoa and for one of the banana FT cooperatives a positive development in terms of women in leadership positions could be revealed, as they are currently headed by a female president. In the Kenyan flower case, women now also occupy after all 40% of supervisor positions, and policies against sexual harassment are in place. In Peru, the FT cooperative, while doing so in the past, currently does not implement any activity directed to women, nor are women occupying leadership positions. In the Indian regions examined in this study, women are still exposed to a range of socio-economic disadvantages. While girls appear to also have opportunities in primary and secondary education, they are still trapped in the traditional role of taking care of household and family duties, especially in lower caste families, often impeding them to pursue higher education or jobs outside of their villages. Most often women face a double-burden of work, being both in charge of the household and engaging in work as tea pickers or on cotton fields. Female cotton farmers do not attend trainings by the CPO and do not represent their farmers in the PEB as of now. Conclusively, while women have to some extent gained power in the African case studies and among Peruvian banana farmers, gender bias can still be found in the Indian cases, and *machismo* continues to be prevalent in Peru.

Overall, FT SPOs, CPOs and HL cases have built up structures that allow **participation** for their members and workers. In all cases, male FT members confirmed to be able to articulate their voice, while this was not the case for all FT female members. Indeed, the institutional effectiveness and level of inclusion differs among the cases. In the cocoa case of Ghana, a three-tier system is set up, in which farmers are adequately reached through extension officers and in Kenya, workers are well-represented in the PEMA to decide on the FT premium spending. While some FT banana cooperatives showed a high degree of institutionalization and mechanisms for mutual communication between administration and farmers, other banana cooperatives and the coffee case showed institutional weaknesses. Farmers of weaker educational background and larger distances to the main office were still insufficiently included into decision-making mechanisms.

Longitudinal development in the social dimension

In the following, changes over time, specifically between the previous and current study, are explored. During the seed assessment exercise, FGD participants were asked to rate their current and past, i.e. five years back, social satisfaction, i.e. their quality of life. Ratings were given on a scale on a 10-point scale, whereby a rating of [10] denoted a very high satisfaction. Figure 6 depicts the average change on their perception.

Figure 6 - Perception of social situation - Average change



It reveals that in the cocoa, flower, and cotton case, FT farmers /workers show, on average, a higher positive change than the comparison group. In the coffee case, both FT and non-FT groups show a deterioration of quality of life. In the banana, case the non-FT group reveals that, on average, the social situation now is perceived to be better than in the FT group. The difference in average change between the FT and non-FT group was testes for its statistical significance, thereby providing insight to the question “Do changes over time differ significantly between FT and non-FT setting?” This leads to the following results:

Table 4 - Results on Differences in the Social Dimension

Social	FT	Non-FT	Significance of difference FT - non-FT
	Average Difference	Average Difference	
Banana	0.92	1.81	(0.23)
Cocoa	4.42	1.59	(0.044) **
Coffee	-2.13	-2.72	(0.52)
Cotton	2.95	1.22	(0.0001) ***
Flowers	1.06	0.55	(0.13)
Tea	3.63	-	

Across all cases, the economic situations always strongly influence social satisfaction of the farmers/workers. Most farmers, except the coffee ones, have experienced an improvement in income levels in the last five years, which reflects on their level of satisfaction and happiness. Same holds true for non-FT farmers. However, FT respondents, except for banana, perceived this improvement to a greater extent. Accordingly, results of the comparison group reveal that there are also external factors contributing to an improved perception of social conditions, but FT members perceive an additional improvement. What are the reasons given for this development?

In the **banana SPOs** the comparison group perceives a higher improvement than the FT group, but results are not statistical significant. Furthermore, overall means, as shown in annex 7.9, are still higher for the FT group. FT farmers mentioned that they perceive happiness due to the obtained stability and security as well as improved opportunities for both for their children and for themselves. Comparing results to the previous study, leads to the following trends and changes:

- While misunderstandings between FT SPOs and local education and health institutes appeared in the predecessor study, in the current study smooth relations between the SPOs and community were found. Communication and awareness on how FT decision-making functions were improved. While support has not yet been assessed to be sufficient, current attempts to design more impactful projects could be revealed. School support of banana SPOs stagnates with some minor infrastructure investments being completed in the last five years.
- In the 2011/12 study, high occurrence of machismos was revealed, leading to a number of social-economic disadvantages of women. The situation has improved considerably in the last five years, as women appear to show enhanced participation and self-esteem and also claiming to have equal say in their households.
- As a new development, this study found that formalized labor of workers is crucial to ensure continuous and effective processes along the supply chain. Nevertheless, it needs to be said that workers are still the least earning entity of the value chain with their monthly wage centering around the minimum wage set by the Peruvian government.
- A potential reason for less positive assessment by FT farmers, could be that due to job opportunities for children outside of their villages families are nowadays separated – something which was not necessarily the case five years ago, but indeed affects social satisfaction of *bananeros*.
- Natural disasters and rising competition through plantations were acknowledged by both FT and non-FT as threat, which could jeopardize current wealth gained, but FT farmer of the strongest SPOs felt that their cooperative, strengthened by the FT premium, is capable of providing a parachute to their members in times of crisis.

In the Ghanaian **cocoa setting**, the average improvement of FT farmers substantially outclasses the development of the comparison group and this difference is significant at a 5% level. Reasons given include, among others, that FT farmers perceived a positive recognition within the community, a feeling of prestige, due their improved capacities thanks to trainings conducted by the cooperative in the last five years. These findings are in line with the previous study:

- The existence of child labor was identified as a problem five years back but in the current study no cases were identified or discussed as an on-going practice in the FGDs. However, as noted, one needs to be cautious in interpreting this finding as awareness on child labor issues has increased and participants could have been careful with regard to disclosure.
- While awareness on FT was found to be low in the last study, the current data revealed that farmers, thanks to intensive trainings, show better understanding on FT processes, e.g. on premium spending.
- Participation continues to be strong thanks to a well-functioning system of extension officers and FT farmers continue to enjoy regular and systematic trainings.

In stark contrast, both FT and non-FT **coffee farmers** experienced a deterioration in quality of life. No statistical evidence could be found that FT farmers perceive it as less deteriorating. Main results of the two studies can only be compared to a limited extent, as the previous study could not implement thorough qualitative data collection in the coffee case:

- Compared to five years back, farmers appear to have experience a fall in self-confidence and pride and have lost trust in the promise of coffee to enable a satisfying livelihood. Feelings of helplessness, fear and despair were prevalent among all coffee producers
- Today, each and every single coffee farmer interviewed faces a state of indebtedness, something that could not be found in the last study.
- CODEFAM, the women’s committee that was emphasized in the last study has not been active in the last five years, resulting in a lack of women-directed trainings in the FT cooperative.
- Despite their precarious situation, the FT coffee farm has been able to set-up a PPP to implement a holistic vocational training course, which goes much beyond the support they provided in 2011.

In the **cotton** setting improvements for both FT and non-FT farmers could be revealed, whereas evidence at a 1% significance level could be found that the FT outclasses the average change of conventional farmers to a great extent. Changes over time and trends that are maintained include the following:

- The last study elaborated to a great extent on the prevalence of child labor. While children continue to support their parents during harvest seasons when schools close, at the same time awareness on the importance of education has risen, especially among FT farmers. While a gender bias cannot be ruled out, girls’ scholarships aim at increasing the number of female students pursuing higher education.
- Both in the past and today, FT farmers appreciate community investment according to their needs.
- To sum up, across all villages, access to primary education up to 8th grade – for both boys and girls does not appear to be problem. However, quality of education, caused by high student/teacher ratios, lack of staff motivation or insufficient teaching capabilities, seems to be problem. The villages of cotton farmers in the region still suffer from low education levels and opportunities to pursue a career that matches their interest and skills beyond farming.

In the **flower** sector in Kenya, moderate improvements could be recognized for both groups with no significance found regarding the difference between FT and non-FT farmers. Qualitative data revealed that the most determining factor in the social dimension is that access to education and future perspectives and opportunities for FT children have declined. Seeing their children advance, widely determines social satisfaction of current FT farmers and workers. The following developments over time can be revealed:

- Both, five years ago and today, the FT flower farm in Kenya provides most educational support and has enhanced their impact for communities.
- Workers continue to lack understanding on the use of the premium as they claim it only for themselves. Awareness in this regard has not risen in the last five years.
- Political instability in Kenya and gentrification lead to less positive improvement in the last five years compared to other cases, causing fear and insecurity towards the future.

The results of the **tea** case study reveal that farmers experience a substantial improvement in their quality of life in the last five years. Comparing results to the 2011/12 study, the following developments over time are revealed:

- At PO#6, the FT premium investments that received most appreciation were gas cookers more than five years ago. Hence, between the last and the current study, no remarkable investment has been made. Furthermore, an initiative of purchasing cows to generate additional income has failed and did not lead to expected outcomes.
- Women-specific issues that were already identified in the previous study, such as need for toilets on plantations or the wish for a functioning gender committee, have not yet been solved.
- Apparently, scholarships continue to be provided, but FGD participants could not confirm the same.

Lastly, the following overall conclusions can be made in the social dimension.

- In the 2011/12 study, education was ranked of highest importance among survey participants across all countries. This trend continues, since most members want their children to advance, and, ideally, move away from agriculture to white-collar jobs in the city.
- While education continues to be a priority by both FT management and its members, the improvement of health levels is considered, by most POs, as public affair.
- On a societal level, two developments need to be emphasized across different regions: Recently and with improving income levels, increased drinking habits of men occur in the banana and tea villages examined, making women feel insecure in the night and more exposed to household violence. Furthermore, the situation of single mothers in Kenya and Peru (banana) is often challenging and additional support systems are inadequately in place.
- The low level of education of farmers was found to be an impeding factor in the last study and continues to be problematic five years later, as it hampers FT members' participation in discussion, decision-making and capacity building.

4.3. Environmental Dimension

The following section refers to findings in the ecologic dimension, including resource and input management, water quality, soil conservation, plant diversity and perception of environmental situation.

4.3.1. Banana Case Study

Resource and Input Management

Piura is a region in Peru, where consequences of climate change can be distinctly recognized: The area is strongly exposed to the El Niño Phenomenon and characterized by climatic variability, which is often unforeseen: In 2011-2012 droughts and water scarcity occurred, in 2016 the region suffered from floods. Cultivation of rice, which some producers carry out to diversify their income, is a water-intensive culture and often based on chemical fertilizers, negatively impacting the disaster-prone area further. Bananas, in general, capture little carbon, thereby lowering the capacity of the respective production region to mitigate climate change. Thus, the area urgently needs to enforce measures to adapt to climate change, such as the prevention of soil erosion, water management, pest prevention, among others. Often adequate research and investments on plagues or diseases accelerated by rising temperatures and variability in rainfall is missing.

In general, a rise in environmental awareness could be noted in both FT and non-FT organizations who have organic certification. The burning of trash was still very common five years ago and could now be reduced as the municipality collects garbage regularly. Measures now taken in favor of the environment include the preparation of humus, strong reduction of the use of pesticides to those allowed in organic production, an awareness campaign in their villages, and an “Environment day” at schools, among others. Especially among FT producers, a critical awareness on current environmental issues could be detected. Women declared their determination to engage more in the issue, stating that “everything starts at home.” Also, FT cooperatives seem to be more advanced in their mitigation measures. Two FT cooperatives regularly carry out plastic collection campaigns, including recycling of the same in Lima. Another one has started a collaboration with the local municipality to collect unrecyclable garbage. Lastly, FT cooperatives offer extensive trainings in environmental issues to their producers. One of the OPP without FT indicated that they do not have the economic resources to make compost and conduct frequent trainings. This indicates that SPOs without FT are too weak to undertake adaptation or mitigation measures to climate change.

However, infrastructure development, such as the increase in cars and motorbikes and the establishment of a sugarcane factory, takes its toll, as producers are now complaining about air pollution in the region, which was less strong five years ago.

Water Quality

As explained above, the situation on water in the Chira valley is two-fold with water being either highly scarce, causing droughts, or being in excess during times of the El Niño phenomenon. Water management is, thus, highly relevant for farmers to ensure irrigation of fields every 20 to 30 days. Fear of drought is widespread, as most villages and agricultural land depend on the reservoir to provide fresh water. In recent years, however, it is losing its capacities and banana producers call for the municipality to solve the issue. The risk of excess or scarcity of water is faced by both FT and non-FT SPOs. It could be observed that some FT cooperatives invested in the optimization of water usage.

They have built a well-functioning canal system and pumps and have established tanks to store water for emergencies. One SPO reported to have implemented gates in irrigation channels, making farmers pay for their water. This resulted in behavior change, i.e. increased appreciation of water by banana farmers and reduced, overall water volume used. Similar measures could not be observed by non-FT cooperatives.

Soil Conservation

Soil erosion, is another problem in northern Peru, and measures taken to maintain soil moisture (e.g. use of rachis as organic matter for soils, among others) are vital to mitigate erosions. The FT certification and especially its premium, has allowed a greater number of trainings in these regards, compared to SPOs that do not count with the premium.

Biodiversity

Despite progress in natural resource management, deforestation of dryland forests (*bosque seco*), a very fragile and critically endangered ecosystem, due to the felling of the *faiques* and *carob* trees is witnessed across the region. Also, tamarind trees have been substantially reduced in the region. Not only trees, but also some varieties of birds like the *chirioca* and *parakeet species* are critically endangered.

4.3.2. Cocoa Case Study

Resource and Input Management

To fulfil the standards of Fairtrade and lately also Rainforest Alliance and UTZ, the cooperative visited for this field study has established a system of regular extension and control services to the communities. In regular trainings in the villages, FT cocoa farmers are informed and trained about proper agricultural and also farm management practices. As a result, farmers and cooperative management reported that through these trainings farmers' management skills have improved tremendously which also reflects in their yields.

Regarding the use of pesticides farmers reported being trained on the proper timing and application of approved chemicals. One FT farmer explicitly stated that excessive use of agrochemicals can be detrimental. Nevertheless, with a number of hazardous cocoa diseases present, the use of certain pesticides is seen as rather beneficial for the yields and protection of the plants. The problem is rather seen in very limited availability of pesticides, fungicides and fertilizers, as they are usually distributed in small numbers by the government and could formerly not be purchased on the market. Yet, for the past two years companies have been allowed to sell them on the open market, as one cooperative management officer revealed. In these instances, it is rather an issue of financial capability for the farmers to get hold of fertilizers.

"I usually travel to other places, those who have farmers union for example in Sefwi, their union are able to get mass spraying and they get higher yield." (Male participant, non-FT, COCOA_FGD_18)

FT Farmers were informed and trained about which approved chemicals to use on their farms and how to apply them in a most safe manner. Lists of pesticides that FT cooperative farmers were

allowed to use as well as lists of hazardous and prohibited materials (HML and PML respectively)⁴³ were available to the farmers in the form of copies or posters in their communities. As there is such a great number, farmers can walk in and check the approved pesticide lists before they purchase and use one. Common local pesticide products named were *Akati Master* and *Confidor*, common fungicides *Normas* and *Ridomils*. Fertilizers like Ammonia were usually supplied by COCOBOD for the seedlings of farmers.

Besides the prerequisites of the FT, UTZ or Rainforest Alliance standards, the central authority regulating and certifying approved chemicals in Ghana is the CRIG (Cocoa Research Institute of Ghana). FT farmers, both male and female, were very aware of issues like proper application of chemicals but rarely discussed potential detrimental environmental effects of pesticide use. Rather they were very sensitive to health implications improper application can have for them personally but also to the community via water contamination. Even though FT farmers also receive training on proper disposal of chemical containers (e.g. not dispose them in water bodies) it is questionable to what extent they can actually follow these proposals, as waste management is still a major problem in the communities.

Water Quality

With respect to water quality, in particular access to safe drinking water as well as measures taken to prevent water contamination were discussed. In the communities visited, access to water was usually not provided by the government but by private or non-profit organizations or individuals. Safe drinking water is either supplied in the form of boreholes or mechanical stand pipes. Access to water is generally the same for FT and non-FT cocoa farmers within the communities visited. In one of the communities both FT and non-FT farmers report that there has been some infrastructure development in the water sector made possible by the engagement of FT. This refers to a manually driven borehole which was financed by the FT premium in 2014. This is one example of a total number of 348 boreholes for drinking water constructed in different villages with the FT premium. Interestingly however, even though the cost for water from the boreholes is lower than the cost for water from the mechanically constructed one, most people prefer the latter as it does not require any form of energy to pump as compared to the borehole. Asked about the development of water supply over time one female non-FT cocoa farmer from the same community reports that five years ago they still had to travel far distances to get access to water.

In relation to water safekeeping measures FT farmers from different villages were quite well informed about issues like approved chemicals for spraying, proper storage and disposal of chemical containers and safe application of pesticides and fungicides. Also, cooperative management officers as well as extension officers stressed the importance of these issues in the trainings provided to the farmers. In this respect, for instance, posters showing approved chemicals are displayed at the cooperative centers in the villages. Furthermore, discussions with both female and male FT cocoa farmers revealed that they were aware of safe distances to be kept from water bodies when spraying and the health implications a disregard of these measures can have for the communities. The following statement of a male FT cocoa farmer illustrates this:

⁴³ Fairtrade Prohibited Materials List (PML) /Hazardous Materials List can be found [here](#). HML has replaced PML on 01 Jan 2018. For the conventional sector Fairtrade currently has the comparatively most comprehensive list of bans, see <http://www.ipm-coalition.org/> for more details.

“Previously, we sprayed along the river bodies and this was causing more sicknesses in the community. But now we have received training.” (Male participant, FT, COCOA_FGD_11)

Soil Conservation

Generally, farmers did not (yet) know much about issues like soil erosion or soil conservation measures. One low-threshold measure promoted by the FT cooperative and mostly adopted by the farmers was the planting of shade trees in an attempt to preserve protective vegetation. While field extension officers and environmental officers made this connection explicitly, farmers did not discuss the roots and consequences of erosion. This was observable for both FT and non-FT farmers alike.

To address this issue more systematically, the cooperative has launched another pilot project in two zones in the very productive western region in 2015. This project was known as cocoa rehabilitation and intensification program (CORIP) and was supported by UK based non-profit organization Twin (in which the cooperative union holds shares) and funded by the Dutch Embassy, Swiss Embassy, NGO *Solidaridad* and the sustainable trade initiative IDH. In this program agricultural extension services focusing on good agronomic and good environmental practices, cocoa farm rehabilitation and soil fertility and management were delivered among others. Together with lead farmers, soil fertility and rehabilitation demonstration fields, as well as integrated soil fertility management plots were established.

Biodiversity

In most cocoa growing areas, the common practice of cultivating the crop is so called “full sun cocoa”. This means that forests are generally cleared to establish a new plot. Through various initiatives, either through extension trainings or special environmental projects, the cooperative is currently promoting the planting of shade trees to protect both the environment and the cocoa trees. Even though FT farmers were not overly aware of the greater environmental benefit of planting or keeping shade trees (e.g. in terms of enhanced biodiversity or soil fertility), they were generally well informed about this agricultural practice. Consequently, both male and female FT farmers reported knowing favorable types of shade trees and planting them in certain intervals at their farms to protect the cocoa trees from direct sunlight and prevent farm burning. This in contrast was not mentioned in discussions with non-FT farmers, which speaks to a lower awareness for this matter.

“Also, we are given trainings on how to combine shade trees with the cocoa trees on our farms. At the training we were taught that for every one acre of cocoa farm, six shade trees should be planted at intervals. This will protect the cocoa trees from direct sunshine and burns and also to protect the environment.” (Female participant, FT, COCOA_FGD_1)

Complementary interviews with extension officers and management of the cooperative named additional pilot projects to enhance farmers cocoa output by ensuring environmentally sustainable systems of farming. One pilot project named in this context was the dynamic agro forestry project which was established in 2016 together with Chocolate Hub, Eco Top, a German-based organization, and Chocolats Halba from Switzerland. In this project lead farmers in selected villages in the Brong Ahafo Region were trained on installing new cocoa farms through planting of food crops as well as timber trees without burning and on rehabilitation, pruning and timber tree planting in old cocoa

farms (reforestation). The project was anticipated to be scaled up as lead farmers were found to have adopted dynamic agro-forestry practices.

4.3.3. Coffee Case Study

Resource and Input Management

Throughout the FGDs and interviews it was reported that the region has been suffering from a changing climate leading to more extremes, i.e. hotter summers and stronger rains. These factors have impacted agricultural production and fauna in the region and beyond. In the Chanchamayo province in Peru, probable problems that climate change is causing, are similar to those in the tropical rainforest:

- Increase of temperature, which has brought new and more persistent plagues, fungi and diseases for plantations and humans.
- The change in growth cycle of crops, which in the case of coffee, has risen the altitude needed for good coffee quality.
- The reduction of water supply, which could have impacts in ecosystem services.

Regarding the increase of temperature, according to experts, the combination of humidity and high temperatures, has created perfect conditions for coffee rust to appear and be spread. A potential hypothesis is hence, that climate change has caused one of the biggest catastrophes in the story of coffee - not only in Peru, but all over Latin America. Until today, the coffee rust fungus could not be completely eliminated and continues to destroy plants in the region. At the same time, due to rising temperatures, production lines, now at 600 meters above sea level, for quality coffee continuously move up to higher altitudes, leaving producers in lower altitudes with low-quality coffees and low marginal returns.

In the last five years, FT farmers have received several capacity building trainings each year with a focus on environmental issues and the protection of the environment in order to keep up to the rules set by the organic and FT certifications. Trainings in the last two years included composting, fungi control, measures to improve quality of coffee plants and shadow creation within plantations. According to the management, the farmers are sensitized well and keep up with the measures learned. Among others, the cooperative has established a culture of garbage separation, differentiation between organic and inorganic waste. The organic waste is turned into compost, which then serves as fertilizer. Inorganic waste is only collected in the village La Florida, which can be accessed well by road. Plastic bottles are sold to the collectors, which serves as additional income for coffee producers but some farmers reported that this has stopped for the last two years. The inorganic waste is then brought to the next urban agglomeration and from there transported to Lima – the only place in Peru where recycling processes are conducted. Distant producers or villages do not count with a garbage collection service. It was confirmed by several farmers that inorganic garbage is put in holes next to their houses and or burned. According to the local CLAC representative, the environment is yet not protected enough even by FT cooperatives. In times of crisis it is not considered a priority.

Non-FT farmers exclusively bury or burn their garbage, but some also have a compost site around their house. One village reported that garbage is thrown away and sewage led to the nearby river,

representing a major health risk to the villagers. Non-FT farmers mentioned that they had not taken part in environmental capacity trainings.

Water Quality

The majority of villages in the region does not count with potable water. In the case of the village La Florida, the closest village to La Merced, the health center chlorinates pipe water. For more remote villages, this is not the case. They are dependent on wells or cascades, whose water in both cases requires boiling before drinking it. Water scarcity is less of a problem in the higher forests but farmers at lower altitudes sometimes encounter problems. In general, with heavier and more frequent rains, water is less of a scarcity problem, but rather sometimes dangerous if flooding is caused.

Soil Conservation

Furthermore, FT farmers do show more awareness on protective measures to maintain biodiversity and soil quality, such as planting trees (e.g. eucalyptus, pine tree, cedar and oaks) within the coffee plantation and hence growing 'below shadow' (*bajo sombra* in Spanish). However, the current crisis also limited opportunities to engage in more intensive reforestation as was done several years back. Also, the abandonment of burning of fields, among the large majority of FT farmers, contributes to higher levels of biodiversity. Nevertheless, as reported by the FT cooperative some farmers, out of despair due to the current crisis, started the cutting of trees to increase their income through selling wood.

Non-FT farmers, especially the ones from the remotest and poorest village, admitted that the burning of fields continues to be quite common practice among farmers. They don't have the financial means to engage in reforestation. Additionally, pesticides have been used to fight fungi, even though the effects on plants and humans are well-known. The FT cooperative stated that there were some discrepancies with the National Recovery Plan for coffee farmers, promoted by the government, as they indicate to let coffee grow in direct sun to maximize the space for cultivation. This would go along with cutting trees in the plantations. The FT cooperative disagrees with the procedure and urges their farmers to grow below shadow, hence not only ensuring better quality of organic coffee, but also being in line with the environment and its diversity in flora and fauna.

Biodiversity

The *Chanchamaya* province does not count with primary forest anymore, but the current crisis as well as population growth and the scarcity of economic opportunities in the Andean has led to migration of some farmers to more inland areas, jeopardizing primary forests there. Non-FT and non-organic farmers are more prone to this scenario, as their soils, treated by chemical fertilizers, deteriorate over time, pushing them to harness better soils of primary forests area. No evidence could be found that FT farmers leave their lands to migrate to primary forest areas. One potential reason is that organic fertilizers, which must be exclusively used by FT farmers, enable to maintain nutritious soils. Yet, there is room for innovation and improvement, as the potential of *aguas mieles*⁴⁴ and coffee husks fertilizers could be harnessed in a more intense manner. In regard to fauna, both non-FT and FT farmers reported that the birds in the region are changing, with some species

⁴⁴ *Aguas mieles* (literally translated as Honey Water) is waste-water that is produced in the fermentation process of coffee, as a residual. This output can be harnessed to produce organic fertilizers.

disappearing. A farmer of a native community confirmed that the men in her community are regularly hunting animals in the forest.

4.3.4. Cotton Case Study

Resource and Input Management

The FT organization has been training farmers in organic farming since 2003 and can be seen as prime responsible for improved organic farming practices in the villages where they operate. The number of FT farmers per village varies between 20-45, sometimes it is up to 90 farmers per village. Instead of approaching new villages, the CPO intends to include all farmers of villages where they already operate. Converting to organic farming and certifying takes three years. While organic farming is more labor intensive, there are less input costs, through reduced usage of fertilizers and pesticides. The FT CPO does not only sensitize and train farmers; they also purchase some of the inputs and ensure quality control during different phases of the cultivation process. For instance, since it is very difficult to buy non-BT seeds from the local market, the FT organization directly supplies their farmers with organic seeds. Furthermore, safety measures when spraying allowed pesticides are taken, enforcing farmers to wear hand gloves and glasses. According to the CPO management, a new initiative has been taken up on vermicomposting, i.e. the breaking down of organic material through the use of worms, bacteria, and fungi. In a pilot project in one FT-village, household and animal waste shall be used to produce an organic soil conditioner. Both mass and individual structures for the production of vermicompost have been introduced in the first phase of the project. While trainings were apparently given, farmers did not mention this aspect in the FGDs.

Water Quality

The Saurashtra county in Gujarat is a predominantly dry region and faces severe water shortages, especially during summer. Water supply both for farms and households remains the greatest challenge in the villages included in the study, as their agriculture produce depends on the amount of rain during the monsoon season due to the lack of reservoirs in the region:

“In the year where there are good rains, condition is good and, in the year, where rains are not good, condition is not good”. (CI, FT farmer)

At the same time, strong rains during the sowing season are equally jeopardizing their cultivation. Deviances in monsoon, hence, severely affect the livelihood of cotton farmers, making them extremely vulnerable towards changes in climate patterns. Currently, there are only 20% of farmers who can work all year long in their fields and do not suffer from water scarcity and only 2% with access to drip irrigation.

According to their management, the FT organization has actively approached the issue of water scarcity by undertaking a water-harnessing initiative combining boreholes and storage tanks in 16 villages and establishing RO plants in village schools, enabling some farmers to get regular drinking water supply. Yet, many farmers claimed during FGDs to still suffer from drinking water scarcity and the problem seems far from being solved. Furthermore, as irrigation is barely practiced, in a joint project with the government, the FT CPO has initiated a drip irrigation project to promote more efficient use of water in the farms. According to a FT farmer, *“the information and teachings that farmers receive from [the FT CPO] helps them a lot. Farmers were unaware of water management*

before because of which there used to be a lot of water wastage.” 30% of the irrigation project is financed by the FT organization while 70% is covered by government subsidiaries.

In non-FT villages it was reported that fresh drinking water supply is problematic as well and only provided once a week with a single tank serving the whole village. Non-FT villages appear to be completely dependent on rainfall in their farming activities.

Soil Conservation

FT farmers stated that soil quality has improved over the years, as *“earlier, the soil used to be harsh while walking on bare feet. It is much softer and fertile than before”*. Due to organic farming practices, which are actively promoted by the FT organization through trainings and dedicated personnel on the ground to guide and support member farmers through this process, soil quality has improved, water usage decreased and input costs, for e.g. insecticides, are lowered. The change caused by organic farming practices on soil quality, is summarized by a FT farmer as follows:

“Before 5 years ago, the farm soil was quite hard resulting in a poor crop yield. Huge amount of water and pesticides had to be employed. There were issues like weeding and less yield. But as a result of [the FT CPO], the land gradually turned fertile, weeding decreased. Now we can do away without pesticides. We are using mostly organic fertilizers. There has been significant boost in the crop yield. Less irrigation is required and income has surged. This is the biggest benefit and major overall positive change has been brought about. (Female participant, FT, COTTON_FGD_8)

The comparison villages examined in this study follow conventional farming as opposed to organic and did not report any improvement in soil quality. Rather, it was reported that during droughts they fight with harsh soil full of cracks, which can hardly be used, and during heavy rain face challenges due to soil wash off.

Biodiversity

Evidence was found that across all villages afforestation projects are implemented and fruit trees are planted by farmers to obtain an additional source of income. According to the Ft management, greater biodiversity and more insects can be observed on organic FT farm. Apparently, there are substantial visual differences between organic and traditional cotton farmers. Thus, improvements in biodiversity can rather be attributed to organic practices than to FT.

4.3.5.Flowers Case Study

Resource and Input Management

The FT farm carries out all of its environmental operations in strict adherence with the National Environment Management Authority (NEMA), a body established under the Environmental Management and Co-ordination Act No. 8 of 1999 (EMCA) as the principal instrument of Government for the implementation of all policies relating to environment. It is accredited by this body and is undergoing yearly environmental audits. Furthermore, through its MPS-A certification, the farm is also obliged to adhere to some of the strictest environmental parameters for management and production in the horticulture industry which is guaranteed by annual third-party audits.

Because roses are very sensitive and prone to pests and consumers expect high quality roses, flower farms use a wide range of chemicals, some of which are not only harmful to sprayers but also to the environment. Nevertheless, environmental standards are required by national law and the MPS and

FT standards. According to the ITC Standards Map (2017)⁴⁵ FT has the most comprehensive requirements in this regard. Consequently, the farm does not use any of the most toxic class 1 chemicals and only resorts to class 2 chemicals whenever absolutely necessary. Instead, it mainly uses class 3 and 4 chemicals. This is in line with Fairtrade's. Following the coming into force of a new law that forces property owners to install solar panels, a solar system has been installed through a crowdfunding initiative which generates almost 200 kWp to run the farm's cold rooms. According to the environmental officer, this would reduce the farm's electricity bills by 60%.

As the non-FT farm is also MPS certified it also complies with high environmental standards. In line with the new energy law, on this farm also a 50 kWp solar facility has been installed on the premises. During the FGDs workers argued that the chemicals they were using nowadays were less harmful to the environment. National and Fairtrade regulations had largely remained the same since the last study was done. The biggest development in regards to resource management came with the instalment of the solar panels based on the coming into force of a new energy law in Kenya.

Water Quality

Erratic rainfall patterns and droughts have severely diminished water resources for communities around Thika and Juja as well as for the flower farms. The FT farm largely covers its water needs through water reservoirs which are fed by the nearby river (Thika River), pumping water from the river itself, from harvesting rain falls and from its own bore-holes (the latter ones being used for drinking water). In accordance with regulations of the Water Resource and Users Association, the farm is only allowed to pump water at night for cooperate use because the water level of the river had dropped significantly during the drought. Water consumption during the day has been restricted to domestic use by households. National law and Fairtrade standards both foresee that farms and communities should negotiate about the farms' water consumption.

In an effort to ensure clean rivers and water sources around its farm premises the FT farm has planted plants and tree nurseries along the water banks. Water is also harvested from the greenhouses and directed to underground reservoirs. Consequently, reused water covers about 35% of the farm's water needs. During the interviews with community representatives, there had been no negative remarks on excessive water use or water disposal by the company. The FT farm is obliged to adhere to strict standards in regards to river bank protection, proper disposal of chemicals and waste water and they cannot dispose waste water close to the river. Hence green houses are far enough away from water sources and human settlements/homes. Through a loan of Germany's investment and development company (DEG), the non-FT farm had initiated a few projects to enhance the company's sustainability and modernize its production facilities. One of the measures included the purchase of a new machine to cleanse water of residual pesticides. Consequently, in regards to water quality in the community, workers mentioned that the water quality has significantly improved over the past years and that water-borne disease like typhus and cholera have been reduced significantly. Asked about the development of water availability FGDs in both cases suggested water scarcity had increased a bit due to ongoing droughts in the previous year. This is why access to the river water for commercial use had been restricted to nightly water use by the local government.

⁴⁵ Please refer to the [ITC Standards Map](#) for further information.

Soil Conservation

There was no indication that soil erosion was a problem at the FT farm. The farm undertakes a number of measures to conserve the soil of the company, such as planting trees or employing new products to increase the moisture level of the soil. Furthermore, soils are regularly sampled and tested for disease causing micro-organisms – pathogens, agro-bacterial - soil profile/compaction and others. Further insights into soil conservation measures could not be provided among the non-FT farm. Findings from the last study indicate that soil erosion was not considered a problem at the FT farm, as concrete drainage systems had been built which prevented soil erosion on the farm premises.

Biodiversity

Before the farm land was converted into a flower farm, it had been used as a coffee farm which hadn't grown any other trees. Since then, a lot of trees and shrubs have been grown on the premises in order to protect the soil and increase plant diversity. Most trees were planted around the headquarters and near the water banks as natural water cleanser. Furthermore, biodiversity baselines were conducted and buffer zones drawn between the greenhouses and community settlements. These efforts also correspond to a government recommendation which stipulates that 10% of a certain area owned by an individual or a group of individuals should be covered with trees. However, it could not be confirmed whether this level could be reached.

More trees were planted in selected community spaces and especially schools with money coming from the Fairtrade premium. Tree planting activities usually take place around World Environment Day and involve workers of the farm and community members at the same time. Observations at the non-FT farm suggested viewable less vegetation.

4.3.6. Tea Case Study

It needs to be noted that the tea garden that was examined in this study, has also adopted organic farming and is certified against several organic standards. While organic standards require profound changes in terms of soil quality and its sustainable management and thus certainly have higher influence in these regards, FT standards in the ecological dimension examine environmental impacts from a broader perspective, including research areas such as biodiversity and resource management.

Resource and Input Management

Instead of using conventional pesticides and GMO techniques, the tea garden solely relies on organic fertilizers and pesticides or biocides and no agrochemicals are used in the gardens. Biocides are purchased from certified companies and some are also being produced with organic inputs from the tea garden itself including cow dung and urine, curd, and jaggery which is being applied to the plants by the workers. PO#6 implements proper waste disposal and waste separation practices. Dustbins, provided with the support of a local NGO, are spread over the factory compound and the villages of the tea gardens. The electricity at the factory and office at PO#6 is supplied by a hydropower plant. The garden uses compost and cow dung purchased from the workers. As per the management, the quantity of produced tea has declined significantly with the introduction of organic farming, while its quality has improved considerably due to organic farming.

Accordingly, FT's impact mainly shows in terms of sustainable plantation management, as well as individual behavior of workers. To illustrate an example: The Liquified Petroleum Gas (LPG) connections which have been provided for workers' houses have reduced the usage of firewood and

kerosene for cooking and the cutting of trees. This could also be observed by the research team when looking down on the villages from an elevated position few smoke columns could be seen even during dinner time.

Water Quality

The water usually comes from sources in the forest areas. Rainwater is used for tea cultivation which made the farms vulnerable to irregular rainfall patterns. At PO#6, water for irrigation is taken from a nearby river or collected from rainwater. Many villages now have a running water facility, however not all households have pipes and taps. Other households need to connect pipes to the water sources (small wells). FGD participants found that the water quality had improved because the forests have become denser. Nevertheless, recurring water shortages posed a problem to the people living in the villages of PO#6. This is why several participants argued that they should receive water tanks either provided by the company or through the FT premium. Nevertheless, especially the upper division experienced frequent shortages in the supply of water. Summing up, the provision of water had improved to a certain extent as running water had been introduced to villages at PO#6, nevertheless, the communities in the tea gardens were still relatively vulnerable to water shortages caused by irregular rainfall patterns. There was no evidence that FT had contributed to the provision of water to the gardens as well as the individual households.

Soil Conservation

Because of the steep and hilly terrain, soil erosion and landslides do occur during the monsoon season. The subject farm undertakes certain measures to reduce the risk of soil erosion including frequent irrigation during the dry season, and (communal) tree planting which is required by Rainforest Alliance. However, participants in the FGDs of PO#6 mentioned that landslides had affected some of their villages during the past monsoon seasons. According to them, five families had lost their houses last year due to landslides. They mentioned that the company had assisted with cleaning up the compounds; however, they had not provided new materials to reconstruct the houses. Workers argue that the erection of walls around the villages could reduce the dangers of landslides for the people living in the villages.

Biodiversity

Tree planting and reforestation are continuing processes and attention is drawn through signs that on the protection of plants and wildlife at the estates. Tea workers observed that the biodiversity of the estate increased after the conversion organic farming, resulting in the return of a greater number of birds and wildlife. This was also related to the fact that they had ceased to collect firewood from the forests due to the use of LPG gas for cooking.

4.3.7. Cross-sectional Findings and Longitudinal Comparison

The following section elaborates on common and different findings across the six cases in the environmental dimension. Later on, results of the quantitative seed assessment are explored and findings triangulated with main conclusions of the previous study.

Cross-sectional findings in the environmental dimension

A general remark on the environmental situation of farmers included in this study needs to be made: Evidence could be found that **climate change** takes its toll across different regions where farmers/workers subject to this study are settled. Apparently, rain patterns are changing and plagues

are on their rise in Peru, and droughts appear more often in Ghana, Kenya and India. Changes in climate patterns have direct consequences on different environmental aspects.

Regarding **resource and input management**, in the cases of banana, coffee, cotton and tea positive impacts on the environment in terms of avoiding contamination through the use of chemicals can be primarily contributed to the organic certification, as it entails even stricter regulations on the use of chemicals and fertilizers than FT⁴⁶. In the case of cotton, this is of special importance considering that conventional cotton farmers use genetically manipulated cotton, which requires a wide range of chemicals. Organic cultivation is more labor-intensive and requires thorough quality checks. The FT CPO and SPOs subject to this study have gained substantial institutional strength, partially through the FT premium, allowing them to support their members in improving quality and productivity of their organic production either through expert advice, technological inputs or multi-stakeholder projects.

In addition, the FT premium allows most CPOs/SPOs to invest in activities targeting the environment, ranging from regular trainings for cocoa farmers on the application of chemicals and plague-fighting measures in the banana case to composting projects for cotton farmers or a World Bank project on organic fertilizers in the coffee case. Last but not least, some FT POs in the banana and tea case, additionally, invest in garbage mitigating measures, such as the provision of dustbins or the establishment of recycling processes. In the flower case, both the FT and non-FT PO adhere to national environmental standards, which have become continuously stricter over the last few years. Yet, additional VSS (FT, MPS) make the national standards verifiable in the first place and also go beyond these national regulations. Both flower farms subject to this study, following a recent call by the government, have invested in solar panels in the last five years.

In the non-FT setting of the SPO and CPO cases, environmental impacts are similar for organic producers, abstaining from the use of chemicals, but additional activities to protect the environment could not be revealed. Trainings in this regard provided by external organizations or the government often take place irregularly, which hampers their sustainability.

Water scarcity is a cause of concern in the context of cotton, flowers, cocoa and banana, making communities in the specific regions extremely vulnerable towards changes in climate patterns. FT POs deal differently with this external threat: while some refer to the government as prime responsible to assure water supply, others, like the Indian cotton CPO, invest in water management measures or facilitate the access to government programs to improve water supply.

FT POs intent to address the topic of **soil quality** and conservation, but so far positive impacts can rather be contributed to organic farming. First and foremost, organic farming practices, using less or no chemicals, have improved soil quality. This is important on two spheres: Firstly, bad soil quality often forces farmers to migrate to new land, as revealed in the cotton and coffee case. By doing so, they often burn down (primary) forest land. Secondly, organic farming contributes to the prevention of soil erosion, as more weed coverage is assured. However, there are also other practices that reduce the risk of soil erosion, such as tree planting and improved irrigation measures. These are, partially, promoted by FT POs, either through trainings or specific projects. Nevertheless, awareness

⁴⁶ Number of Pesticides prohibited or restricted per (non-organic) Standard: FT (432), RA (389), UTZ (253).

levels on the importance of planting trees among farmers were rather low (banana), or financial means to follow the same were insufficient (coffee).

Interesting findings were found on the topic of **biodiversity** across the different cases. Seldomly, measures were taken to maintain biodiversity per se, but it was rather a positive side effect. For instance, afforestation was done to protect plants (cocoa) or achieve an additional certification to preserve birds in the region (coffee). Additional observations in the Indian tea plantation as well as in cotton fields were that after introducing organic cultivation, certain insects, birds and wildlife had returned to the region. In the cotton case, in addition, organic and FT certification contribute to the conservation of GMO-free cotton varieties. Financed by the premium the FT tea plantation also provided gas connection for cooking, reducing the amount of firewood needed by the working families. Conclusively, measures to obtain and maintain FT certification (and other), indirectly have a positive impact on biodiversity as compared to uncertified plantations.

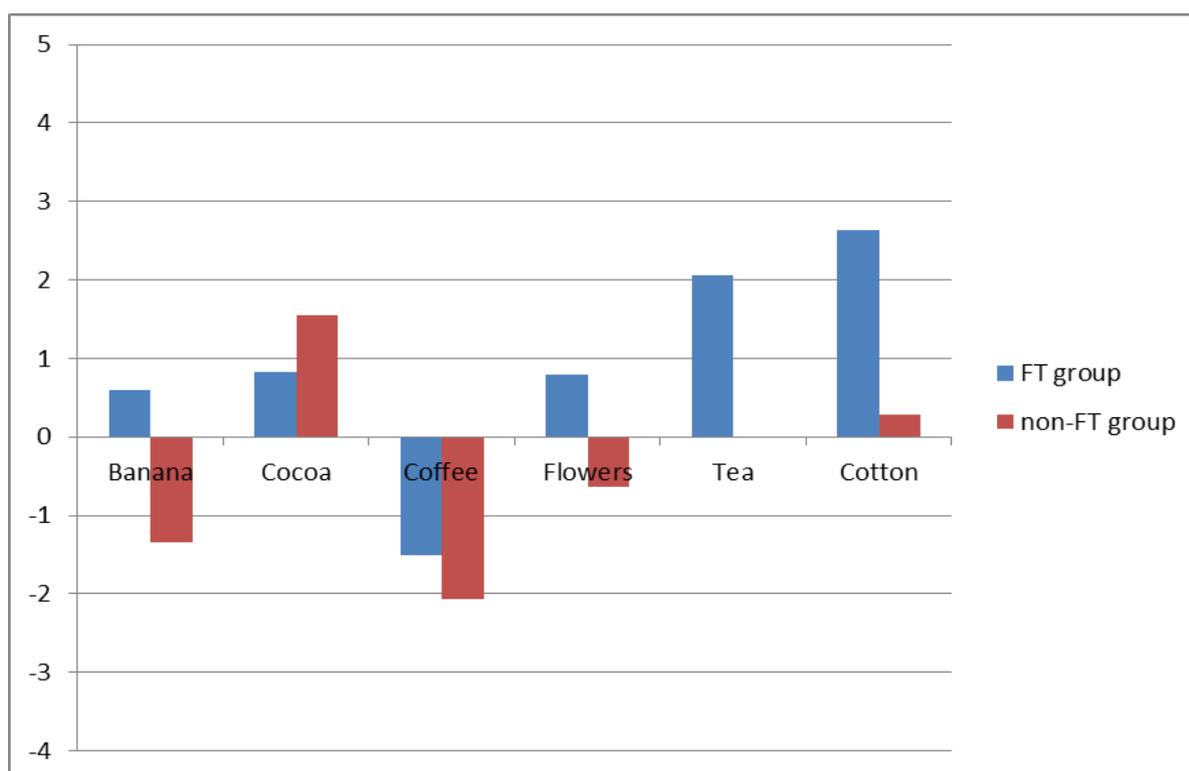
Longitudinal findings in the environmental dimension

In the following section developments over time in the ecologic dimension shall be explored. Thereby, a combination of insights from the seed assessment exercise of this study and central findings in the economic dimension of the 2011/12 study will be shared, ultimately allowing for a triangulation and validation of changes in this dimension. With regard to the predecessor study, in particular the question shall be addressed whether key developments detected in the 2011/12 study are reflected in the follow-up study.

In the seed assessment exercise, the quantitative participatory rating, farmers /workers were asked to give ratings of their perception of the current and past (5 years ago) ecologic situation in their direct environment on a 10-point scale, whereby a rating of [10] denoted a very high satisfaction with the environmental situation. Being aware of potential distortions and hence limited comparability of average *absolute* ratings⁴⁷, the following graph depicts the average perceived *changes* over time between the FT and non-FT groups for the six case studies. Except for the coffee case, the rating exercise shows that FT farmers /workers generally see an improvement in the environmental situation – yet to different extents. The banana and flowers cases can be highlighted since non-FT farmers /workers during the same time rather saw deterioration in this dimension. Furthermore, the cocoa case reflects a greater positive change among the non-FT group. Finally, it is worth mentioning that FT cotton farmers saw a comparatively much greater improvement in the environmental situation than non-FT cotton farmers.

⁴⁷ While a rating of 7 in one case might stand for a very positive rating, it might denote a low satisfaction in a different case study, hence thwarting comparability between these two cases.

Figure 7 - Perception of environmental situation - Average change



Following the same procedure as in the other dimensions, the difference in average change between the FT and non-FT group has been tested for its statistical significance, thereby providing insight to the question “Do changes over time differ significantly between FT and non-FT setting?” This leads to the following results:

Table 5 - Results on Differences in the Environmental Dimension

Environmental	FT	Non-FT	Significance of difference FT - non-FT
	Average Difference	Average Difference	
Banana	0.59	-1,34	(0.09) *
Cocoa	0.822	1.49	(0.154)
Coffee	-0.68	-2.58	(0.021) **
Cotton	2.64	0.28	(0.0005)***
Flowers	0.79	-0.64	(0.01) **
Tea	2.07	-	-

Note: *** means significant at the 1% level, ** means significant at the 5% level, * means significant at the 10% level.

In the **banana case** a statistical significant difference (at 10% level) can be found between the two groups: While FT farmers perceive improvement, non-FT farmers perceive that their environmental situation has deteriorated in the last five years. The different assessments between FT and non-FT banana farmers can be explained by FT cooperatives’ investment in environmental affairs, such as trainings on plagues, celebration of environmental day in schools and efforts to improve garbage

management. The following central continuations from the predecessor study can be made out for the banana case:

- Water shortage still remains one of the most pressing problems for the farmers and the adjacent communities.
- Small scale measure like composting and plastic recycling introduced by FT have become established.

In the case of **cocoa farmers**, according to the quantitative perception data the difference between FT and non-FT group are not significant, but a substantial gender difference in the ecologic rating could be observed: while especially male FT cocoa farmers were rather pessimistic in terms of environmental developments, female FT and non-FT farmers saw much more positive developments. Consulting central conclusions of the predecessor study, a number of continuing trends can be made out:

- Awareness raising measures on sustainable agricultural practices were continued and progressively extended by the FT cooperative.
- Training programs on various (agricultural) issues continue to be one of the most valued benefits received from being a cooperative member.
- FT cocoa farmers continue adopting environmentally friendly farming techniques (e.g. composting, planting of shady trees).

As the **coffee case** on the other hand saw a major shock in the environmental dimension due to the coffee rust plague and consequent destruction of entire farms, the downward development, shown in Figure 7, among both FT and non-FT certified coffee farmers is not surprising. Yet, FT farmer perceived it to be less negative than the non-FT group according to the results of the seed assessments (significant at a 5% level). Reasons given during FGDs are that non-FT farmers have revived the practice of burning fields. The following central trends from the predecessor study can be made out:

- The 2011/12 study concluded increased awareness regarding environmental practices (e.g. composting), mainly due to trainings under UTZ and RA certification. This trend, partially, continues as FT farmers stick to environmental policies established by the cooperative.
- In the current study, all farmers complained about changing weather patterns, leading to heavier rain and stronger sunlight – the aftermath of climate change were less mentioned during the last study.

In the **cotton case**, improvement perceived in the last five years by FT farmers exceeds non-FT farmer perception with the difference being statistical significant at a 1% level. The very positive rating of the FT group has to be interpreted against the background of the FT farm being certified organic from the beginning and even before FT certification, while the comparison group relies on GMO cotton. Consequently, FT cotton farmers reported rather differentiated improvements in the ecologic sphere, such as soil improvements and enhanced biodiversity, as a result of organic farming techniques. This in turn was not mentioned by the comparison group. Turning towards central conclusions of the predecessor study, the following conclusions can be made out for the cotton case:

- Water scarcity remains one of the most pressing problems for both FT and non-FT cotton farmers. Acknowledging this need, a drip irrigation project is on the verge of entry.
- Differences in awareness about the benefits of environmentally friendly farming practices for the whole community continue to be very pronounced between organic and BT cotton farmers remains.

In the **flowers case** the environmental situation in the eyes of FT workers has subjectively increased in the last five years, while the non-FT group perceived a slight deterioration. The difference of the two groups is statistical significant at a 5% level. Aspects to be mentioned in this regard are afforestation efforts undertaken by the FT flower farm as well as measures taken on the farm and in the communities in order to tackle issues of water scarcity and contamination. Such measures are however not undertaken by the comparison farm, where especially water supply was said to be an issue. For the flowers case, the following central continuations from the predecessor study can be made out:

- Environmentally friendly agricultural practices such as prohibition of waste burning, use of micro-organisms for soil protection and composting of green waste are still in place and implemented.
- The FT farm has stepped up and continued its efforts regarding water management and preventing pollution of water bodies.
- Regular FT audits continue to assist adherence to existing national regulations.

For the **tea case** the FT group reported pronounced improvements. The following central continuations from the predecessor study can be made out for the tea case:

- Positive changes regarding the environmental dimension were primarily attributed to the fulfilment of requirements under the organic certification – an observation that can be concluded also in the follow-up study.

5. General Conclusion and Recommendations

5.1. Conclusion

To conclude the findings of the study, the authors refer back to FT's ToC (see Chapter 2), which – together with the COSA set of indicators – served as main theoretical backbone of this study. In the following, overall ratings are given for the eight different impact areas recognized in the ToC to ultimately close on the research hypothesis:

“The Fairtrade-certification has a positive impact not only for the producers but also for the development of their surroundings/geographical environment, i.e. the involvement and participation of residents in rural development activities and the social, economic and environmental conditions in rural areas, typically the home region of members/workers of Fairtrade-PO.”

The overall grading system differentiates between the following six categories. Table 6 describes the rating system:

Table 6 - Rating system applied

Color Code	Descriptive Rating
	Not at all
	To a small extent
	To some extent
	To a moderate extent
	To a great extent
	To a very great extent

Ratings for each sub-case are consolidated and one aggregated rating will be given for each impact area. At this point it should be noted again that ratings have to be treated with care as they are by no means representative for entire product categories and settings but rather indicate tendencies that are hugely inspired by the specific case studies and the findings presented in chapter 4. This being said, they nevertheless provide a summarizing perspective on FT’s contribution towards aspired impacts in the case study settings.

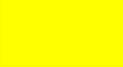
It is hence concluded that FT *contributes to a great extent* towards the impact area “Increased dignity, confidence, control & choice”. Farmers’ /workers’ active participation in democratic decision making through various FT induced committees as well as transparent processes have to be mentioned as central aspects under this impact area. Acknowledging the influence of (national) framework conditions and other actors, a *moderate contribution* of FT is seen in the impact areas “Improved household income, assets & standard of living”, “Increased environmental sustainability & resilience to climate change” and “Enhanced influence & status of small producers”. Here, central aspects contributing are stable floor prices and further allowances, enhanced environmental awareness through trainings and influence on PO decision-making. Furthermore, indications for FT’s *contribution to some extent* is deducted for the impact areas “Less risk & vulnerability, increased food security”, “Improved access to basic services” and “Increased cooperation & gender equality within communities”. Central factors to be named in this context are unforeseen events such as natural disasters or ruptures in world commodity markets, large geographical extensions and persisting traditional gender roles. Lastly, only a small contribution of FT on the impact area “Inter-generational sustainability of rural communities” can be concluded, as only limited attractive job opportunities are created for the next generation of farmers.

Against this background the following conclusion is drawn: By means of FT certification a positive impact for producers can be brought about in the economic, social and environmental dimension. The extent to which positive changes can be realized yet depend to a large extent on the regional and cultural settings as well as the institutional strength and organizational form of the respective FT PO. Facilitated primarily by the FT premium, positive changes for the development of producers’ surroundings are still found on a limited scale but attempts to achieve more impactful investments are made by some FT actors.

Table 7 depicts case study rating, supported by one main argument, and an aggregated rating for each impact area:

Table 7 - Overall Assessment of FT's contribution towards ToC impact areas

Impact 1	Improved household income, assets & standard of living		
	Banana	✓ FT contributes to a very great extent by ensuring income security to its farmers.	
	Cocoa	✓ FT contributes to a great extent by enabling their farmers to achieve higher yields.	
	Coffee	✓ FT contributes to a small extent via the minimum price, but living income, currently, is not assured.	
	Cotton	✓ FT contributes to a great extent, above all, through provision of inputs that increase available income.	
	Flowers	✓ FT contributes to a moderate extent through allowances, but wages remain low.	
	Tea	✓ FT does not contribute at all, as wages do not cover basic needs sufficiently.	
Impact 2	Less risk & vulnerability, increased food security		
	Banana	✓ FT contributes to a great extent, as premium serves as parachute during natural disasters.	
	Cocoa	✓ FT contributes to some extent by providing income diversification training.	
	Coffee	✓ FT contributes to a small extent, by providing some support in times of crisis.	
	Cotton	✓ FT contributes to a small extent, by setting up direct contracts with producers.	
	Flowers	✓ FT contributes to a great extent, as it provides stable working condition and income to workers.	
	Tea	✓ FT does not contribute at all, as farmers cannot afford healthy food, are not able to save nor have land titles.	
Impact 3	Improved access to basic services		
	Banana	✓ FT contributes to a great extent by strengthening villages and initiating partnerships with municipality.	
	Cocoa	✓ FT contributes to a small extent as infrastructure developments have to be shared among more than 100.000 farmers.	
	Coffee	✓ FT contributes to a small extent, but only in their main village while remote farmers remain without support.	
	Cotton	✓ FT contributes to some extent in respect to drinking water and irrigation.	
	Flowers	✓ FT contributes to a great extent through substantial investments in education and health.	
	Tea	✓ FT contributes to some extent, by providing housing and basic services, yet they are of low-level quality.	

Impact 4	Increased environmental sustainability & resilience to climate change		
	Banana	✓ FT (at strong SPOs) contributes to a moderate extent by investing in training on environmental measures.	
	Cocoa	✓ FT contributes to a moderate extent by providing farmers with understandable training on sustainable agriculture.	
	Coffee	✓ FT contributes to a moderate extent by implementing measures in favor of the environment.	
	Cotton	✓ FT contributes to a moderate extent by investing in organic practices and water management.	
	Flowers	✓ FT contributes to a great extent by enhancing the enforcement of existing national environmental regulations	
	Tea	✓ FT does not contribute at all, as no evidence was found in this regard.	
Impact 5	Inter-generational sustainability of rural communities		
	Banana	✓ FT contributes to a small extent, by providing new job opportunities within the cooperatives.	
	Cocoa	✓ FT does not contribute at all, as children turn away from cocoa farming due to lack of attractive livelihood prospects.	
	Coffee	✓ FT does not contribute at all, as children turn away from coffee due to lack of “living income”.	
	Cotton	✓ FT contributes to a moderate extent by providing comparatively favorable income generation conditions.	
	Flowers	Does not apply	/
	Tea	Does not apply	/
Impact 6	Increased cooperation & gender equality within communities		
	Banana	✓ FT contributes to a moderate extent through gender-specific trainings.	
	Cocoa	✓ FT contributes to a great extent by actively promoting women in leadership positions and providing skills trainings for women.	
	Coffee	✓ FT contributes to a small exchange, but main women-related activities have stopped in the last five years.	
	Cotton	✓ FT contributes not at all, as often men are members of the CPO, attend training and take decisions.	
	Flowers	✓ FT contributes to a moderate extent, as a gender committee has been set up, but the majority of supervisors remain to be male.	
	Tea	✓ FT contributes to a moderate extent, enabling participation of both sexes in the FPC, but women often seem to be unheard.	

Impact 7	Increased dignity, confidence, control & choice		
	Banana	✓ FT contributes to a very great extent, making farmers participate in with pride and “owe” their cooperative.	
	Cocoa	✓ FT contributes to a very great extent by providing a forum for engagement and involving farmers in central decision making.	
	Coffee	✓ FT contributes to some extent, as despite the crisis, the majority of farmers remain loyal to their cooperative.	
	Cotton	✓ FT contributes to moderate extent, as male farmers expressed greater understanding of their rights vis-à-vis the CPO.	
	Flowers	✓ FT contributes to a very great extent, as workers appeared to be proud of their work, considering it among the best of the region.	
	Tea	✓ FT contributes to a small extent by gradually changing power relations.	
Impact 8	Enhanced influence & status of small producers		
	Banana	✓ FT contributes to a very great extent, making family participate in and “owe” their cooperative.	
	Cocoa	✓ FT contributes to a very great extent, as farmers feel are asked to share knowledge learned in trainings in their community.	
	Coffee	✓ FT contributes to a small extent, as only farmers in the main village still experience status and express pride.	
	Cotton	✓ FT contributes to a moderate extent, as farmers enjoy direct relationships.	
	Flowers	✓ FT contributes to a great extent, as farmers can actively influence decisions through a strong role of the union.	
	Tea	✓ FT does not contribute at all.	

5.2. Recommendations

Lastly, specific recommendations are shared and directed to FLO International/ TransFair e.V., FT regional networks, SPOs / CPOs and HL POs.

Directed to FLO International e.V. / TransFair e.V

R1: Raise investments for climate change mitigation: Natural disasters in the banana case, changing climate patterns and new plagues for coffee producers and water scarcity across the Indian sub-continent – thorough evidence could be found that climate change is already impacting marginalized producers. Consequently, POs require investments to implement concrete adaptation measures. FT alone will not be able to secure sufficient financial resources but requires support from different actors along the supply-chain. Importers, retailers or other related companies have, indeed, an interest in continuously sourcing resources from the Global South and should, therefore, expand their responsibility across the whole resource chain. At the same time, for instance, university

partnerships could be set-up to conduct action-oriented research on environmental challenges FT farmer face including specific issues like plague emergence and resistance. In general, FT's data base on environmental issues is still substantially low and it is recommended to invest in more research in this regard.

R2: Facilitate (supply chain) stakeholder support in times of crisis. The study revealed that unforeseen developments, be it political turmoil, natural disasters or an aggressive plague, can trigger a profound crisis for producers/ workers. Fairtrade attempts to support their POs in times of emergency but should vehemently mobilize and sensitize their vast network of supporters of private companies, NGOs and multi-lateral organizations to join their efforts. For instance, Corporate Social Responsibility (CSR) funds should be used more often, as it is assumed that companies would be willing to provide emergency support. Fairtrade should examine how and what mechanisms need to be established or improved to efficiently and timely leverage CSR and other resources, especially in times of crisis.

R3: Improve resilience of small-scale farmers and workers. Besides emergency support, as elaborated in R2, it is equally important to enhance long-term resilience of producers and workers. Serious efforts should go into finding solutions for affordable, effective and sustainable agricultural insurance and pension systems, which further enhance farmers' trust and willingness to engage in agricultural activities and make them feel proud and self-confident towards their profession. Collaborations with other stakeholders have to be initiated to tackle these complex issues and, above all, working with the government might be necessary to find solutions for these unsolved problems.

R4: Examine sustainability of capacity building measures financed by the premium. As per current standards, the cooperatives count with freedom in terms of premium investments⁴⁸. Yet, the study showed that there might be incidences, where the FT premium was not always invested in the most sustainable and impactful way. In the coffee case, it was revealed that a substantial share of the FT premium was invested in capacity building of the management, but that directives or presidents of cooperatives often showed a high fluctuation rate, changing every year. Hence, the sustainability of these capacity building investments cannot be ensured and might often only yield rather individual benefits than institutional learning and growth. It is, hence, recommended that POs are better guided in their premium investments. However, these guidelines are highly context depended and cannot be easily generalized: In the case of coffee, FT premium money should flow more into trainings of members as they represent more stable constitutes of the cooperative.

R5: Investigate the occurrence of so-called 'ghost-cooperatives'. In both the coffee and cocoa case, it could be revealed that cooperatives initiated by companies emerged but did not actually count any members or decision-making power structures as per FT regulation. This development is of high cause for concern since the FT system appears to be misused for companies' benefits in these specific regions. Often members of regional networks are aware of these occurrences and more direct exchange and solution-finding should be fostered to counter fight such negative developments in the regions.

⁴⁸ At the moment, FT discusses in their current SPO standard review if guidelines on premium investments shall be tightened.

R6: Continue to work on strategies to increase sales under FT. This study found that the impact of FT on small-scale farms and cooperatives is still limited, due to low shares of FT on total sales. FT premium investments are still marginal in terms of social outcomes. This holds especially true in the cases of cocoa, tea, flowers and cotton, while in the case of banana the strongest SPOs sells between 80 and 100% under FT. Achieving an increased market penetration should, thus, continue to be of utmost importance for Fairtrade. FT International has – also based on recommendations of the CEval 2011/12 study – introduced in 2014 so called Fairtrade Sourcing Programs, which have strongly increased FT cocoa sales on the German market and are now also implemented by other NFOs. This business model, now newly termed as Fairtrade Sourced Ingredients, will now be open for all Fairtrade products except coffee and bananas. The case of tea is more complicated due to several factors: First and foremost, the issue on working conditions in tea gardens continues to be a highly political issue and requires joint lobbying efforts from a number of both national and international stakeholders. Secondly, in Germany, tea consumption remains, generally, low compared to coffee consumption. Consequently, promoting higher market shares for FT tea would require different strategies, above all, closer cooperation with more mainstream tea producing and retailing companies.

Directed to FT regional networks (Fairtrade Africa, NAPP, CLAC)

R7: Improve capacities in social program design to move from output to outcome. Several case studies have shown that SPO/CPO/HL management, or their project staff for social affairs, requires better capacities in result-based social program design to move beyond mere infrastructure projects or one-time trainings. The research revealed that many FT cooperatives / HL POs are now mature enough to not only handle well the premium but also to constitute an important player in rural community development. It is recommended to invest in more complex partnership-based programs with measurable outcomes, such as establishing a financially sustainable diabetes center, as currently pursued by one of the banana SPOs. For the same, technical assistance and specific capacity building is required, ideally facilitated by regional networks.

R8: Create a space for knowledge sharing among FT POs. Going along with R5, several POs mentioned that there is a need of learning and knowledge exchange among them. Best practices on FT premium investment could be shared more frequently and both online and offline settings could be created to facilitate these processes. These must not necessarily bring together actors on a national or supra-national level but could also entail to have monthly meetings between POs in the same product category and region. At the same time, also worker committees could be encouraged to exchange experiences and could consider carrying out inter-community projects – e.g. learning centers etc. of several FT farms in the region. Lastly, even competitions could be set up between different POs, since, actually, a competitive edge could be found between banana cooperatives in Peru. Indeed, competition around, e.g. the most impactful premium spending or highest member satisfaction could lead to an increase in both efforts of management and ownership of cooperative members.

Directed to SPO /CPOs

R9: Improve scale-up strategies of cooperatives. Distance is a crucial factor in price-building as well retrieving benefits from the FT SPO. In the case of coffee, a very centralized strategy has been

followed while scaling with the main processing plants and other equipment being centered in the city or one bigger village. This impedes farmer who live far away to, actually, benefit from premium investments. Instead of large, centralized processing plants, smaller plants, e.g. one per village, could be set up to also cater to the needs of members who are living remotely. A thorough cost-benefit analysis is needed to assess whether this would be indeed beneficial, while still being cost-effective. The Ghanaian cocoa cooperative subject to this study can be considered as best practice, as well-functioning extension offices cater to 100,000 FT cooperative members.

R10: Promote income diversification. Diversification is to some extent difficult for SPO management, as they sometimes struggle to assure that members hand in enough of their produce to fulfill trading contracts. Therefore, it is understandable that they do not actively promote the cultivation of other crops. Nevertheless, it is indispensable to ensure “living income”, an acceptable quality of life level, and in some cases even survival of their farmers. POs should promote diversification of their members to ensure that they continue their farming activities even in times of crisis, instead of migrating to cities. In specific, trainings on different sources for diversification could be provided along with technical assistance and an initial funding, on the basis of micro credits. The study revealed that, currently, awareness on the diversification of income sources for both FT and non-FT farmers has increased but is still too low to enable stable livelihood for farmers in the region.

R11: Create attractive opportunities for the next generation of farmers. This study revealed that in most SPO settings, children of current members aim at leaving agriculture behind and seek for higher education and jobs in the cities. The difficulty in this is two-fold: One the one hand, youth migration impedes sustainable development of villages and on the other hand urban agglomerations only yield limited opportunities for migrant youth, often making them engaged in unskilled, low-income jobs. Agriculture per se could necessarily be both profitable and enjoyable, but currently does not attract the majority of young people of the regions examined in this study. That’s why, new opportunities for youth must be identified to improve the image of agricultural practice and find areas of work that match with their interests and talents. For instance, a fruitful development in this regard could be found in the coffee sector in Peru, where the national coffee sector is slowly developing, opening up opportunities in coffee tasting, coffee bars or technical consultants. It is recommended to conduct more research on aspirations and perception of the younger generation of farmer to cater to their needs in the future.

R 12: Explore opportunities to help farmers invest in the modernization of their farms. The study showed that especially for self-employed smallholder farmers, the acquisition of funds for necessary investments into their farms poses a huge challenge – especially for female farmers. SPOs /CPOs may either assist in the actual acquisition of funds (e.g. by setting up credit schemes) or explore alternative ways that support farmers in the modernization of their farms (e.g. by providing seeds or other farm inputs), as the danger is seen that small farmers will otherwise migrate to customers who can address this desperation. Such measures could be flanked by simultaneous efforts towards financial literacy.

Directed to HL POs

R13: Take action on the call for living wages. FT has obliged their POs to move towards *living wages*, at least in terms of income increasement above inflation rate, and Fairtrade Germany already

actively communicates this demand with important stakeholders in the German and international development landscape. Still, the case studies, illustrated that wages paid on the flower and tea farms are not perceived to be sufficient to enable sustainable livelihoods and are currently below the recommended Global Living Wage. Whereas in the flower case improvements can be slowly recognized, in the case of tea, it is a highly political issue and the government of West Bengal does not seem to act in this regard. Comparing this year's findings with the 2011/12 study, reveals that no change in implementing a fair minimum wage in the Indian tea sector has occurred. Instead, colonial structures are preserved and an increase in power of tea garden workers is feared by key stakeholders. Hence, FI and its HL POs should examine if and to what extent the current situation on tea farms in West Bengal is still in line with the FT approach and its principles and take actions accordingly.

6. Literature

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7. Annex

7.1. Analysis grid

Please find the analysis grid [here](#).

7.2. Overview data collection Peru / banana

Expert Interviews

Code	Organization	Position
BANANA_Ex_1	TransFair e.V.	Supply Chain Manager Banana
BANANA_Ex_2	CLAC	Northern Region

Key Informant Interviews with Cooperatives

Code	Association	Position
BANANA_KII_1	PO#1a	Manager
BANANA_KII_2	PO#1a	Quality Control
BANANA_KII_3	PO#1a	Director
BANANA_KII_4	PO#1a	Assisstant – Social Issues
BANANA_KII_5	PO#1b	Manager
BANANA_KII_6	PO#1b	Assisstant – Social Issues
BANANA_KII_7	PO#1b	Responsible- Certifications
BANANA_KII_8	PO#1b	Vicepresident
BANANA_KII_9	PO#1d	Administrative secretary
BANANA_KII_10	PO#1d	Economic secretary
BANANA_KII_11	PO#1d	Fiscilation secretary
BANANA_KII_12	PO#1d	President of Audits
BANANA_KII_13	PO#1d	Spokesman Audits
BANANA_KII_14	PO#1d	Manager
BANANA_KII_15	PO#1d	President

BANANA_KII_16	PO#1d	Internal inspector, Monitoring
BANANA_KII_17	PO#1d	Director community services and social development
BANANA_KII_18	PO#1d	Director, Vicepresident, Spokemen
BANANA_KII_19	PO#1d	Responsible for Human Resources
BANANA_KII_18	PO#1c	Responsible for technical assistance
BANANA_KII_19	PO#1c	President; Vice president
BANANA_KII_20	PO#1c	Responsible Quality Control
BANANA_KII_21	CO#1c	Responsible Certifications
BANANA_KII_22	CO#1c	President
BANANA_KII_23	CO#1c	General Manager
BANANA_KII_24	CO#1b	Vice president
BANANA_KII_25	CO#1b	Manager
BANANA_KII_26	CO#1a	President
BANANA_KII_27	CO#1a	Treasury

Focus Group Discussions

Code	Association	Type	Number of participants
BANANA_FGD_1	PO#1a	Treatment	6 women
BANANA_FGD_2	PO#1a	Treatment	3 men
BANANA_FGD_3	PO#1b	Treatment	4 women
BANANA_FGD_4	PO#1b	Treatment	6 men
BANANA_FGD_5	PO#1c	Treatment	3 women
Banana_FGD_6	PO#1c	Treatment	6 men
BANANA_FGD_7	PO#1d	Treatment	6 women

BANANA_FGD_8	PO#1d	Treatment	4 men
BANANA_FGD_9	CO#1c	Comparison	4 women
BANANA_FGD_10	CO#1c	Comparison	3 men
BANANA_FGD_11	CO#1c	Comparison	4 men, 2 women
BANANA_FGD_12	CO#1a	Comparison	6 men, 1 woman
BANANA_FGD_13	CO#1a	Comparison	6 men
BANANA_FGD_14	CO#1b	Comparison	4 women
BANANA_FGD_15	CO#1b	Comparison	3 men
BANANA_FGD_16	CO#1b	Comparison	10 men, 2 women (workers in packing station)

Community Interviews (CI)

Code	Village	Position
BANANA_CI_1	Querecotillo	Coordinator of nurses, Health Center
BANANA_CI_2	Santa Cruz / Querecotillo	Administrator, Primary School
BANANA_CI_3	Gualtaqac	Primary School Teacher
BANANA_CI_3	Salitral	Doctor
BANANA_CI_4	Salitral	Director of community services, social development and environmental issues
BANANA_CI_5	Salitral	Doctor, Health Center
BANANA_CI_6	Samán Chico	One father and two mothers of inhabiting families

Participatory observation

- Visit of *cuadrilla* of PO#1b (FT certified), including explanation of harvesting, treatment and packing process
- Visit of *cuadrilla* of PO#1d (recently decertified)
- Visit of *cuadrilla* of CO#1b, including interaction with workers on site

7.3. Overview data collection Ghana / cotton

Key Informant Interviews with Cooperative

Code	Association	Position
COCOA_KII_1	PO#2	Executive Secretary
COCOA_KII_2	PO#2	Environmental Manager
COCOA_KII_3	PO#2	Gender Manager
COCOA_KII_4	PO#2	Manager
COCOA_KII_5	PO#2	IT & Operations Manager
COCOA_KII_6	PO#2	Communication Officer
COCOA_KII_7	PO#2	Project Officer Education

Focus Group Discussions

Code	Association	Village	Type	Number of participants
COCOA_FGD_1	PO#2	Kokofu	Treatment	5 women
COCOA_FGD_2	Independent	Kokofu	Comparison	2 women
COCOA_FGD_3	PO#2	Kokofu	Treatment	5 men
COCOA_FGD_4	Independent	Kokofu	Comparison	6 men
COCOA_FGD_5	PO#2	Nobewam	Treatment	6 women
COCOA_FGD_6	Independent	Nobewam	Comparison	4 women
COCOA_FGD_7	PO#2	Nobewam	Treatment	6 men
COCOA_FGD_8	Independent	Nobewam	Comparison	6 men
COCOA_FGD_9	PO#2	Bipoa	Treatment	5 women
COCOA_FGD_10	Independent	Bipoa	Comparison	2 women
COCOA_FGD_11	PO#2	Bipoa	Treatment	10 men
COCOA_FGD_12	Independent	Bipoa	Comparison	5 men

COCOA_FGD_13	PO#2	Mem	Treatment	5men
COCOA_FGD_14	Independent	Mem	Comparison	6 men
COCOA_FGD_15	PO#2	Mem	Treatment	6 women
COCOA_FGD_16	Independent	Mem	Comparison	4 women
COCOA_FGD_17	Independent	Yaase-Adwafo	Comparison	5 women
COCOA_FGD_18	Independent	Yaase-Adwafo	Comparison	7 men

Community Interviews (CI)

Code	Village	Position
COCOA_CI_1	Nobewam	Teacher
COCOA_CI_2	Nobewam	Extension Officer
COCOA_CI_3	Bipoa	Extension Officer
COCOA_CI_4	Bipoa	Community Representative to the Chief
COCOA_CI_5	Mem	Teacher
COCOA_CI_6	Mem	Extension Officer

Participatory observations

- Visit of community meeting center, Nobewam
- Visit of storage and drying facility, Bipoa

7.4. Overview data collection Peru / coffee

Expert Interviews

Code	Organization	Position
COFFEE_Ex_1	TransFair e.V.	Supply Chain Management Coffee
COFFEE_Ex_2	CLAC	Central Region (Junín)

Key Informant Interviews with FT cooperative PO#3a

No	Position
COFFEE_KII_1	Technical personnel for Quality and Certification
COFFEE_KII_2	
COFFEE_KII_3	Director
COFFEE_KI_4	Director of administrative council
COFFEE_KI_5	Vice-president of administrative council
COFFEE_KI_6	Coordinator of World Bank Project: “Capacitación por Competencias”
COFFEE_KI_7	Responsible for education and general well-being
COFFEE_KI_8	Responsible for exportation processes
COFFEE_KI_9	Assistent for quality and exportation
COFFEE_KI_10	Administrator for Collector plant in PO#3a
COFFEE_KI_11	Head of Accountability
COFFEE_KI_12	President of ‘CO#3a’ (Comparison)
COFFEE_KI_13	Secretary of ‘CO#3a’ (Comparison)
COFFEE_KI_14	Directive of ‘CO#3b’ (Treasury and Mobilizer) (Comparison)

Focus Group Discussions

No	Village	Type	No of participants
FGD_COFFEE_1	La Florida	Treatment	7 Men, 1 Woman
FGD_COFFEE_2	La Florida	Treatment	6 Men, 1 Woman
FGD_COFFEE_3	Alto Yurinaki	Treatment	6 Men
FGD_COFFEE_4	Alto Yurinaki	Treatment	5 Women
FGD_COFFEE_5	Miguel Grau	Treatment	7 Women, 1 Man
FGD_COFFEE_6	Alto La Florida	Treatment	5 Women
FGD_COFFEE_7	Jose Olaya	Treatment	12 Men
FGD_COFFEE_8	Jose Olaya	Treatment	5 Women

FGD_COFFEE_9	Tupac Amaru	Comparison	11 Men
FGD_COFFEE_10	Tupac Amaru	Comparison	4 Women
FGD_COFFEE_11	Alto La Florida / La Florida	Comparison	2 Men
C FGD_COFFEE_12	Alto La Florida / La Florida	Comparison	3 Women
FGD_COFFEE_13	La Florida	Comparison	3 Women
FGD_COFFEE_14	La Florida	Comparison	6 Men

Community Interviews

Code	Village	Position
COFFEE_CI_1	Alto Yurinaki	Nurse, Health Center
COFFEE_CI_2	Las Palmas	Producer of native community San Pedro de Sheboriari (Asháninka/ Yanesha) who sells to the private company Bíoazul
COFFEE_CI_3	Las Palmas	Son of Coffee producer in the native community San Pedro de Sheboriari
COFFEE_CI_4	Las Palmas	Children of Las Palma
COFFEE_CI_5	La Florida	Dentist of health center
COFFEE_CI_6	La Merced	Administrator of COINCA SAC, local branch of Neumann Coffee Group, Germany

Comment: The professors were on vacation, outside of the village, during the point of data collection.

Observations

- Collector plant in Salsipuede
- Project site of World Bank project on organic fertilizer production through mushroom plantation

7.5. Overview data collection India / cotton

Key Informant Interviews

Code	Organization	Position
COTTON_KII_1	PO#4	Assistant Farm Manager
COTTON_KII_2	PO#4	CSR Manager
COTTON_KII_3	PO#4	Field Officer
COTTON_KII_4	PO#4	Field Officer

Focus Group Discussions

Code	Village	Type	Number of participants
COTTON_FGD_1	Lakhachokiya	Treatment	15 men
COTTON_FGD_2	Lakhachokiya	Treatment	10 women
COTTON_FGD_3	Mokasar	Treatment	15 men
COTTON_FGD_4	Mokasar	Treatment	12 women
COTTON_FGD_5	Pipaliya	Treatment	15 men
COTTON_FGD_6	Pipaliya	Treatment	6 women
COTTON_FGD_7	Dharai	Treatment	15 men
COTTON_FGD_8	Dharai	Treatment	12 women
COTTON_FGD_9	Piprali	Treatment	17 men
COTTON_FGD_10	Piprali	Treatment	8 women
COTTON_FGD_11	Jivapar	Comparison	10 men
COTTON_FGD_12	Jivapar	Comparison	6 women
COTTON_FGD_13	Anandpur	Comparison	10 men
COTTON_FGD_14	Anandpur	Comparison	10 men
COTTON_FGD_15	Anandpur	Comparison	12 women
COTTON_FGD_16	Anandpur		10 women

Community Interviews (CI)

Code	Village	Position
COTTON_CI_1	Lakhachokiya	Teacher, Lakhachokiya school
COTTON_CI_2	Lakhachokiya	ASHA Worker
COTTON_CI_3	Lakhachokiya	Village President (Sarpanch)
COTTON_CI_4	Lakhachokiya	PEB member
COTTON_CI_5	Lakhachokiya	Teacher, Lakhachokiya school
COTTON_CI_6	Mokasar	Sarpanch
COTTON_CI_7	Mokasar	Teachers, Village School
COTTON_CI_8	Mokasar	Doctor, Village Hospital
COTTON_CI_9	Mokasar	Sarpanch
COTTON_CI_10	Dharai	Sarpanch
COTTON_CI_11	Dharai	Headmaster
COTTON_CI_12	Dharai	ASHA Worker
COTTON_CI_13	Pipaliya	Sarpanch
COTTON_CI_14	Piprali	Principal, Village Primary School
COTTON_CI_15	Piprali	PEB Member
COTTON_CI_16	Piprali	Village President
COTTON_CI_17	Piprali	Multipurpose Health Worker
COTTON_CI_18	Piprali	Principal, Village Primary School
COTTON_CI_19	Jivapur	Teacher
COTTON_CI_20	Jivapur	Sarpanch
COTTON_CI_21	Anandpur	ASHA Worker
COTTON_CI_22	Anandpur	Sarpanch

Participatory observations

- Visit of schools and health centers in 6 of the 7 villages visited
- Visiting homes of cotton farmers and village residents in all villages visited
- Observing cotton farmers on the field

7.6. Overview data collection Kenya / flowers

Expert Interviews

Code	Organization	Position
FLOWERS_EX_1	Max Havelaar	Senior Business Development Manager, Flowers

Key Informant Interviews with Farm Management

Code	Association	Position
FLOWERS_KII_1	PO#5a	Fairtrade and Administration and Certification Officer
FLOWERS_KII_2	PO#5a	Chief accountant
FLOWERS_KII_3	PO#5a	Health and Safety Officer
FLOWERS_KII_4	PO#5a	Operations Manager
FLOWERS_KII_5	PO#5a	n.a.
FLOWERS_KII_6	PO#5a	Project Coordinator community relations

Focus Group Discussions

Code	Association	Community	Type	Number of participants
FLOWERS_FGD_1	PO#5a	Thika	Treatment	6 women
FLOWERS_FGD_2	PO#5a	Thika	Treatment	6 women
FLOWERS_FGD_3	PO#5a	Thika	Treatment	6 men
FLOWERS_FGD_4	PO#5a	Thika	Treatment	5 men
FLOWERS_FGD_5	PO#5a	Juja	Treatment	6 women
FLOWERS_FGD_6	PO#5a	Juja	Treatment	5 women
FLOWERS_FGD_7	PO#5a	Juja	Treatment	6 men
FLOWERS_FGD_8	PO#5a	Juja	Treatment	7 men

FLOWERS_FGD_9	CO#5	Juja	Comparison	5 women
FLOWERS_FGD_10	CO#5	Juja	Comparison	6 women
FLOWERS_FGD_11	CO#5	Juja	Comparison	5 men
FLOWERS_FGD_12	CO#5	Juja	Comparison	5 men
FLOWERS_FGD_13	CO#5	Juja	Comparison	5men
FLOWERS_FGD_14	CO#5	Juja	Comparison	5 men
FLOWERS_FGD_15	CO#5	Juja	Comparison	5 women
FLOWERS_FGD_16	CO#5	Juja	Comparison	6 women

Worker Representation (WR)

Code	Community	Position
FLOWERS_WR_1	Thika	Gender Committee
FLOWERS_WR_2	Thika	Gender Committee
FLOWERS_WR_3	Thika	Gender Committee
FLOWERS_WR_4	Thika	Fairtrade Premium Committee
FLOWERS_WR_5	Thika	Fairtrade Premium Committee
FLOWERS_WR_6	Thika	Secretary to the SACCO
FLOWERS_WR_7	Thika	SACCO
FLOWERS_WR_8	Thika	Farm owner
FLOWERSWRI_9	Thika	Shop Steward
FLOWERS_WR_10	Thika	Shop Steward

Community Interviews (CI)

Code	Community	Position
FLOWERS_CI_1	Thika	Head Teacher
FLOWERS_CI_2	Juja	Local NGO (Young Moms)

Empowerment Foundation		
FLOWERS_CI_3	Juja	Religious Leader
FLOWERS_CI_4	Juja	Women Organization on Health and Safety
FLOWERS_CI_5	Juja	Head Teacher
FLOWERS_CI_6	Juja	Media Manager
FLOWERS_CI_7	Juja	Administration Officer

7.7. Overview data collection India / Tea

Expert Interviews

Code	Organization	Position
TEA_Ex_1	NAPP	Associate Principal NAPP
TEA_Ex_2	TransFair e.V.	Junior Supply Chain Manager
TEA_Ex_3	TransFair e.V.	Senior Key Account Manager

Key Informant Interviews (Management and worker representatives)

Code	Farm	Position
TEA_KII_1	PO#6	Compounder
TEA_KII_2	PO#6	Treasurer
TEA_KII_3	PO#6	Executive Member of the NGO
TEA_KII_4	PO#6	Manager
TEA_KII_5	PO#6	Assistant Manager
TEA_KII_6	PO#6	FPC Member (Supervisor/Field Staff)
TEA_KII_7	PO#6	FPC Member (Supervisor/Field Staff)
TEA_KII_8	PO#6	FPC Member
TEA_KII_9	PO#6	FPC Member

TEA_KII_10

PO#6

FPC Member

Focus Group Discussions

Code	Farm	Type	Number of participants
TEA_FGD_1	PO#6	Treatment_1	5 women
TEA_FGD_2	PO#6	Treatment_1	5 women
TEA_FGD_3	PO#6	Treatment_1	6 women
TEA_FGD_4	PO#6	Treatment_1	6 women
TEA_FGD_5	PO#6	Treatment_1	4 men
TEA_FGD_6	PO#6	Treatment_1	5 men
TEA_FGD_7	PO#6	Treatment_1	5 women
TEA_FGD_7	PO#6	Treatment_1	5 women
TEA_FGD_8	PO#6	Treatment_1	5 women
TEA_FGD_9	PO#6	Treatment_1	5 women

Community Interviews (CI)

Code	Farm	Position
TEA_KII_1	PO#6	Medical Helper
TEA_KII_2	PO#6	Midwife
TEA_KII_3	PO#6	Lalighuras Convention (Ngo) President
TEA_KII_4	PO#6	Executive Member of the NGO
TEA_KII_5	PO#6	Headmaster
TEA_KII_6	PO#6	Teacher (All Subjects)
TEA_KII_7	PO#6	Principal (Kotigaon School)

Participatory observation

- Visit of tea factory, including explanation of harvesting, treatment and shipping process

- Visit of tea garden, including explanation of planting and harvesting process and introduction of organic farming including visit of organic fertilizer production site, interaction with workers in the tea garden

7.8. Overview of means in economic dimension – participatory seed assessment

The following table compares average ratings in the economic dimension from the quantitative seed assessment exercise implemented at the end of all FGDs. FGD participants were asked to assess their today’s and past satisfaction towards their economic situation on a scale from 0 to 10 where 0 stands for very low standard and 10 for excellent standard. Below, average ratings given by FT and non-FT farmers across the six product settings are presented for two points in time. As *absolute values* of the ratings have to be treated with care (while a rating of 7 in one case might stand for a very positive rating, it might denote a low satisfaction in a different case study, hence thwarting comparability between these two cases) only *changes* over time and between the FT and non-FT group were discussed in chapter 4.1.7. The below table however provides the basis for the calculation of mean differences of Table 3.

Economic	FT		Non-FT	
	<i>Five years back</i>	<i>Today</i>	<i>Five years back</i>	<i>Today</i>
Banana	5.30	7.57	4.5	5.8
Cocoa	2.92	6.73	5.57	4.38
Coffee	6.2	3.38	6.8	3.34
Cotton	3.85	7.70	4.52	5.83
Flowers	5.13	5.08	3.12	2.59
Tea	4.07	6.93	-	-

7.9. Overview of means in social dimension – participatory seed assessment

The following table compares average ratings in the social dimension from the quantitative seed assessment exercise implemented at the end of all FGDs. FGD participants were asked to assess their today’s and past satisfaction towards their economic situation on a scale from 0 to 10 where 0 stands for very low standard and 10 for excellent standard. Below, average ratings given by FT and non-FT farmers across the six product settings are presented for two points in time. As *absolute values* of the ratings have to be treated with care, only *changes* over time and between the FT and non-FT group were discussed in chapter 4.2.7. The below table however provides the basis for the calculation of mean differences of Table 4.

Social	FT		Non-FT	
	<i>Five years back</i>	<i>Today</i>	<i>Five years back</i>	<i>Today</i>
Banana	6.95	7.86	4.8	6.6
Cocoa	3.15	7.56	4.63	6.17
Coffee	6.9	4.8	7.6	4.9
Cotton	4.07	7.02	3.39	4.61
Flowers	4.33	5.39	4.57	5.12
Tea	4.67	8.30	-	-

7.10. Overview of means in environmental dimension – participatory seed assessment

The following table compares average ratings in the social dimension from the quantitative seed assessment exercise implemented at the end of all FGDs. FGD participants were asked to assess their today's and past satisfaction towards their economic situation on a scale from 0 to 10 where 0 stands for very low standard and 10 for excellent standard. Below, average ratings given by FT and non-FT farmers across the six product settings are presented for two points in time. As *absolute values* of the ratings have to be treated with care, only *changes* over time and between the FT and non-FT group were discussed in chapter 4.3.7. The below table however provides the basis for the calculation of mean differences of Table 5.

Environmental	FT		Non-FT	
	<i>Five years back</i>	<i>Today</i>	<i>Five years back</i>	<i>Today</i>
Banana	5.54	6.14	5.81	4.47
Cocoa	4.46	5.28	4.40	5.89
Coffee	6.90	5.4	7.03	4.96
Cotton	4.23	6.87	2.84	4.28
Flowers	4.73	5.52	5.36	4.71
Tea	5.76	7.83	-	-