GLOBAL REPORT

Analysis of the producer level impact of Fairtrade on environmentally friendly production, biodiversity conservation and resilience and adaptation to climate change

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LIST OF ABBREVIATIONS

AR	*Assessment Report*
CLAC	*Coordinadora de Latinoamerica y del Caribe de Pequeños Productores y Trabajadores de Comercio Justo (Latin American Producer Network)*
FAO	*Food and Agriculture Organization of the United Nations*
FDG	*Focus Group Discussion*
FTA	*Fairtrade Africa*
GHG	*Greenhouse Gas(es)*
HL	*Hired Labour (Standard)*
HLO	*Hired Labour Organization*
IPCC	*Intergovernmental Panel on Climate Change*
KFC	*Kenya Flower Council*
KII	*Key Informant Interviews*
LISIS	*Laboratoire Interdisciplinaire Sciences Innovations Sociétés*
MPS	*Milieu Programma Sierteelt (Environmental Programme Floriculture)*
NAPP	*Network of Asia and Pacific Producers*
PN	*Producer Network*
PO	*Producer Organization*
SPO	*Small-scale Producer Organization (Standard)*
TOC	*Theory of Change*
TRI	*Tea Research Institute (India)*

EXECUTIVE SUMMARY

Fairtrade International commissioned a study to examine the impact of Fairtrade with regard to environmental protection, biodiversity conservation and adaptation to climate change. For this purpose, the following three Fairtrade interventions were assessed: Fairtrade Standards (Standard for Small-scale Producer Organizations v1.5 and Hired Labour Standard v1.5), Fairtrade support (trainings, projects) for producer organizations and the use of the Fairtrade Premium. Fairtrade's Theory of Change (ToC) provided the framework for the theory-based contribution analysis. Qualitative and quantitative data available in the Fairtrade system, i.e. audit results, data from its own monitoring and evaluation activities and additional data collected during the auditing process was analysed as well as existing relevant impact studies on sustainability standards. Furthermore, Key Informant Interviews (KII) with internal (Fairtrade International (Fairtrade), National Fairtrade Organizations (NFOs), Producer Networks (PN), FLOCERT, and Producer Organizations (POs)) as well as external (private licence holders and civil society) stakeholders provided additional qualitative data. Primary qualitative data was collected during six case studies

Main Conclusions and Recommendations at a Glance

The main conclusions of the analysis are:

• The three Fairtrade interventions (Standard implementation, Fairtrade support and Premium use) offer opportunities for POs to work towards environmental impact but do not necessarily encourage environmental actions.

• Of the three interventions, Premiums are considered the best and strongest option to actively generate environmental impacts.

• Interaction of the three interventions is crucial to achieve environmental impact.

• Environmental topics are hardly reflected on an organizational level; relevant structures and processes are barely in place.

Based on the analysis the following recommendations are prioritized:

1. For interventions at PO level: Offer guidance to prioritize Premium projects that are economically viable and at the same time have environmental co-benefits, e.g. tree plantations or reduction of inputs (energy, pesticides, water, etc.); implement best practices for Premium use as already happens in HL settings.

2. For interventions at PN level: Have a Monitoring and Evaluation (M&E) system in place which tracks impacts as well as activities. This is not only relevant for environmental projects but also for Standard implementation, producer support and Premium use. A first step could be establishing baselines, e.g. through risk assessments as encouraged by SPO Standard v2.1. Building in a review process of such risk assessment results every three years (i.e. for every renewal audit) would allow for tracking change.

3. For interventions at Fairtrade International and National Fairtrade Organization level: Strengthen the Theory of Change regarding the interaction of the different intervention options based on a strategy for environmental protection and highlight this interplay across the Fairtrade system.

that included data analysis, Focus Group Discussions (FGD), transect walks, KII and individual farmer interviews and homestead visits. The following case studies were conducted:

1. Coffee in Kenya

2. Flowers in Kenya

3. Tea in India

4. Cotton in India

5. Cocoa in Costa Rica

6. Bananas in Panama

Results from each case study are summed up in individual case study reports. Executive summaries on each are available in Annex II of this report. The aggregated findings of all data collection activities are:

Key environmental challenges as perceived by the POs:

The main environmental challenges (for ease of reading "environmental" refers to environmental, biodiversity and climate change aspects throughout the whole of this report) perceived by the POs are deforestation, water contamination, changes in rainfalls (changes in onset and ends of rains, in amounts of rains, in frequency and severity of rains), water scarcity and increasing temperatures. Producers thereby confirm global trends as laid out in international scientific climate change publications.

Environment related impacts of Fairtrade Standards:

- The Hired Labour (HL) Standard v1.5 and the Small-scale Producer Organization (SPO) Standard v1.5 cover many environmentally relevant topics. However, in v1.5 of the SPO Standard, for example, the majority (about 60 percent) of the environmental criteria are development criteria and 40 percent are core criteria. In the new SPO Standard v2.1, published in April 2019, this ratio shifted to 50 percent development and 50 percent core criteria in the environmental section. The difference is that core criteria have to be fulfilled in the indicated timeframe, whereas development criteria are fulfilled as follows: the total of all results (ranks) on development criteria is divided by the number of these criteria applicable in that year. So, if the calculated average is 3.0 or more, they are compliant. If it is below 3.0, then they have to increase the rank of some of them in order to reach at least 3.0. Therefore, some environmental development criteria may never be complied with.

- Analysis of the audit data available (SCORE data from 2013 to 2017) shows that compliance with the environmental criteria is no constraint for POs to achieve or maintain certification. Among the SPOs, seven percent of the non-compliances recorded were in the environmental section; among Hired Labour Organizations (HLOs) only two percent were. Of the seven percent of non-conformities across SPOs only two percent had any implication for the certification status, i.e. asking for corrective measures or potentially a suspension. Of the two percent of non-conformities across HLOs only two percent had consequences for the organizations. This indicates that the relevance of environmental non-compliances is low.

- Throughout the case studies it was found that Standard implementation leads to strengthened organizational structures, which in turn foster increased environmental awareness and responsibility among the POs. In 50 percent of the case studies this has led to attracting partners who engage in environmental interventions.

- Direct impacts of the Fairtrade Standards on environmental protection, climate change adaptation and biodiversity conservation are low. Many POs hold other certifications that have stricter environmental criteria; therefore, such impacts cannot be attributed to Fairtrade. Nonetheless, the one case study where the PO did not count on any other certification (the coffee PO in Kenya) showed that implementation of the Fairtrade SPO Standard leads to enhanced buffer zone management and enhanced agrochemical management. Impacts such as, for example, enhanced water and/or soil quality could not be confirmed, though, due to a lack of relevant data.

Impacts of Fairtrade's support (projects and training):

- Data availability on Fairtrade's support, such as the number of trainings offered on environmental aspects or the number, duration, objectives, funders of environmental projects is unclear. Lists on such interventions have been provided but are incomplete. They do not provide all information per recorded intervention nor do they list all the interventions mentioned in the analysis. Insufficient internal structures on environmental aspects are the cause of this lack of clear data.

- Of the three topics (environment, climate change and biodiversity) climate change is the most targeted challenge.

- Coffee is the sector receiving most environmental support, which is not surprising considering the number of POs in the Fairtrade system.

- Internal and external stakeholders confirm a growing interest in working on environmental aspects together with and through Fairtrade.

- The POs visited for the case study assessments have received hardly any support specifically on environmental, climate change or biodiversity aspects. The banana PO highlighted that Fairtrade's Standard trainings were also useful with regard to implementing the environmental criteria of other standard schemes.

The same PO participates in a Program for Integrated Productivity focusing on healthier soils, integrated pest management and the production of organic fertilizers. Activities are funded with Premium money and the project is primarily perceived to support cost reduction and increased production. So it is the socio-economic benefits that have motivated the PO to enter this programme; the environmental benefits are regarded as co-benefits.

Impacts of Fairtrade Premium use:

- In addition to the audit data, FLOCERT collects data during most audits for use by Fairtrade organizations (CODImpact data). According to the CODImpact data from 2014 to 2016, 5.44 percent of the total Premium generated by SPOs and HLOs has been invested in environmental issues - 1.57 percent by HLOs and 6.05 percent by SPOs. Investments in socio-economic aspects are given much more priority.

- Investment decisions depend on:

    - Who benefits from the investment: Benefits for SPO members are more direct due to investments in production or environmental issues resulting in quality or quantity benefits, while for HLO workers (who decide upon Premium use) investments in environmental issues hardly translate into any direct benefits for them.

    - The amount of Premium received: The more Premium money available, the higher the likelihood of also investing in environmental aspects.

    - Socio-economic considerations drive Premium investment decisions; environmental impacts are rather achieved as co-benefits.

Main conclusions:

- The stronger the organizational capacities of the PO, the more likely the achievement of environmental impact by Fairtrade interventions.

- The three Fairtrade interventions (Standard implementation, Fairtrade support and Premium use) offer opportunities for POs to work towards environmental impact but do not necessarily encourage environmental actions.

- Of the three interventions, Premium funds are considered the best and strongest option to actively generate environmental impacts. The Standards can serve as a safeguarding system that guarantees a minimum environmentally friendly performance in agricultural production. In the presence of other certifications, especially organic, implementation of the Fairtrade Standards adds little extra benefit regarding environmental impacts.[1] Fairtrade engagement on the ground is a powerful approach where funds and staff time are available. Unfortunately, these are limited.

- Interaction of the three interventions is crucial to achieve environmental impact.

- Environmental topics are hardly reflected at organizational level. Structures and processes within the different Fairtrade organizations (PN, NFO and Fairtrade International) as well as the Fairtrade system (interaction between the different actors) are barely in place to capture and assess environmental interventions and their impacts. Knowledge is available with single persons and hardly institutionalized.

Based on the analysis the following recommendations are prioritized (for further recommendations see Chapter 6).

For interventions at PO level:

1. Offer guidance to prioritize Premium projects that are economically viable and at the same time have environmental co-benefits, e.g. tree plantations or reduction of inputs (energy, pesticides, water, etc.); implement best practices for Premium use as already happens in HL settings.

2. Consider climate change and its impacts more strategically (i.e. climate change projections and trends), e.g.:

- via risk assessments (already part of SPO Standard v2.1)

- via suitability maps (projections on future risks)

1 In the absence of other certifications, implementation of the Fairtrade Standards probably generates some environmental impacts (depending on national laws and structures).

- via adaptation plans (and mitigation targets)
- via consideration in the business plan

3. Collaborate with specialists and technological entities (especially national agricultural research centres, meteorological institutions and governmental agencies) to complement advisory services (e.g. climate change projections, research) and to increase cash flow in environmental projects.

For interventions at PN level:

1. Have an Monitoring and Evaluation (M&E) system in place which tracks impacts and not only activities. This is relevant for environmental projects, and also for Standard implementation, producer support and Premium use. A first step could be establishing baselines, e.g. through risk assessments as encouraged by SPO Standard v2.1. Building in a review process of such risk assessment results every three years (i.e. for every renewal audit) would allow for tracking change.

2. Further strengthen capacities (staff time and expertise) on environmental topics, specifically on climate change adaptation. This can be done by internal trainings and webinars and ensuring everyone knows where to access relevant information and material.

3. Increase the awareness of POs that climate change might be a risk for their business model (i.e. the value chains that they are currently focusing on). This can be done by including relevant sessions in Standard trainings.

For interventions at Fairtrade International and National Fairtrade Organization level:

1. Strengthen the Theory of Change regarding the interaction of the different intervention options based on a strategy for environmental protection and highlight this interplay across the Fairtrade system.

2. Build up internal structures and procedures to: a) record environmental activities, and b) share relevant records, results and lessons learnt across the system.

3. Screen for best practices on environmental impacts and share these across the Fairtrade system. Elaborate them bit by bit based on project experience, training experience, Premium use experience and Standard implementation experience.

1. INTRODUCTION

1.1. Background to the study

Fairtrade has a focus on social aspects. Initially, the Standards and producer support did not take into account the environmental impact of Fairtrade certified agricultural production. Over time, both Fairtrade Standards and programmes have included more and more environmental aspects. As of today, environmental criteria make up about a quarter of the criteria of the Fairtrade Hired Labour (HL) Standard and the criteria of the Fairtrade Standards for Small-scale Producer Organizations (SPO) and for Contract Production (CP). These include issues such as pest management, pesticide use, soil management, water management, biodiversity and more. Fairtrade programmes support producers around these issues as well as in building their resilience and adaptation strategies for climate change. Furthermore, Fairtrade sets incentives for organic production with a higher Fairtrade Minimum Price and Premium for products certified and sold as Fairtrade organic.

There is a growing interest in Fairtrade's impact on the protection of the environment, the conservation of biodiversity and adaptation to climate change. However, no study has systematically and exclusively assessed the environmental impacts[2] of Fairtrade.

Fairtrade International therefore commissioned an impact evaluation to analyse if and how agricultural production under Fairtrade conditions supports environmental protection, biodiversity conservation, and adaptation to climate change/resilience.

1.2. Objectives of the study and evaluation questions

The objective of this impact evaluation was to assess if and how the Fairtrade system, through its interventions, supports environmental protection, biodiversity conservation, and climate change adaptation/resilience. In addition, the resulting environmental related benefits for Fairtrade farmers, workers, and their communities have been assessed.

Fairtrade has three main types of interventions:

1. The Fairtrade Standards include many environmental criteria which make up the 'rules' for (mostly) agricultural production, biodiversity protection, fair trading practices, as well as organizational development as key to functional smallholder organizations.

2. Fairtrade engagement on the ground – e.g. producer programmes, capacity building and projects (increasingly funded by third parties such as bilateral donors, NGOs, or other supply chain actors, e.g. retail companies) – aim to strengthen, for example, the application of better natural resources management, environmentally friendly agricultural practices, and adaptation to climate change.

3. In addition to the Fairtrade Standards and Minimum Prices (set for the major commodities traded as Fairtrade except for flowers[3]), farmer and worker organizations receive an additional sum of money called the Fairtrade Premium. According to Fairtrade, the Premium is important for Fairtrade's impact on the environment because if environmental projects are implemented by Fairtrade organizations, they are, to a large extent, financed through the Fairtrade Premium.

Therefore, the study aimed to answer the following evaluation question: How do Fairtrade (1) Standards and Tools, (2) Programmes and Capacity Building, and (3) Premium investments impact on environmental protection, biodiversity conservation, and climate change adaptation/ resilience?

Underlying questions were:

- What are the perceived environmental challenges from the producer organization's (PO) perspective?
- How do Fairtrade interventions (individually and together) address environmental issues across

2 For ease of reading "environmental impacts" may include all three – environment, biodiversity and climate change aspects – in the following chapters.

3 So far, it has not been possible to determine a minimum price for one individual flower.

products and geographies? What are their strengths and weaknesses?

- Are there non-intended economic or social impacts from environmental approaches?
- Which gender is more important to target environmental interventions (gender perspective)?

The global study had four main data collection instruments:

- The review and analysis of existing studies on the environmental impact of Fairtrade and/or other standard systems.
- The analysis of the data available in the Fairtrade system on the application of environmental criteria, on environmentally themed Fairtrade producer programmes and capacity building, and on environmentally themed investments of the Fairtrade Premium.
- The in-depth assessment of six case studies from Fairtrade producers to examine their environmental impact using a mixed method approach.
- Interviews with key stakeholders (Fairtrade International, Producer Networks, National Fairtrade Organizations, research organizations, NGOs).

2. EVALUATION APPROACH

Due to the nature of the study, the analysis was summative, i.e. assessing and summing up achievements so far, and formative, i.e. process and future oriented by providing suggestions on how to improve the environmental impact. In order to reach both objectives, a mix of different methodological approaches for the analysis of Fairtrade's environmental impact was applied. At the start of the analysis, existing information such as audit results, international studies, and data available from Fairtrade International were assessed. In parallel, 18 interviews were held with internal Fairtrade staff[4] and 11 with external representatives, i.e. NGOs or actors holding a Fairtrade licence and trading Fairtrade products (for the list of interviewees see Annex I). Based on these inputs, six case studies were conducted, which included the assessment of available data specifically for these POs as well as on-site visits for participatory impact assessments, field visits, further interviews and wrap-up workshops with each PO.

The criteria for case study selection were:

- Regions: Covering all Fairtrade regions (Africa/Middle East, Asia/Pacific and Latin America/Caribbean).
- Products: Covering at least Fairtrade's most important products, i.e. coffee, cocoa and bananas.
- Importance of the country for the Fairtrade system: Considering total certified volumes sold, percentage of Fairtrade sales vis-à-vis non-Fairtrade volumes sold in a given country and/or number of certified farmers.
- Type of producer organization: Small-scale Producer Organizations (SPOs) and Hired Labour Organizations (HLOs), with priority given to SPOs as more than 80 percent of Fairtrade certified organizations are POs.
- Timeframe under Fairtrade certification: PO participating in the Fairtrade system since at least 2010.
- Multiple certifications: Avoidance of multi-certified POs as far as possible.

Additional criteria considered:

- Location of the Producer Network support staff: Possibility to collaborate with the Producer Networks (PN) or their representatives.
- Environmental performance: Based on the SCORE data differing environmental performance among the selected POs.
- Premium use: Based on the CODImpact data differing Premium investments among the POs.
- List of environmental projects: Inclusion of POs that are involved in environmental projects and POs that are not involved.

These criteria were applied to the CODImpact data for identification of matching countries and POs. As five to six case studies across the main Fairtrade commodities (coffee, cocoa, bananas, tea, cotton and flowers) were sought, i.e. the top five production countries per commodity were identified. In a second step, possible combinations of products per country and continent were analysed. The results of this analysis were:

- Peru or Colombia for cocoa and banana case studies.
- Kenya for coffee and flower case studies.
- India for tea and cotton case studies.

To identify matching POs in these countries, the average total production volumes per PO in a given commodity were established and the top five POs (i.e. closest to average production) per pre-selected producing country were assessed. The identified POs were then proposed to the Producer Networks for checking against other criteria such as multiple certification, time availability and timeframe with Fairtrade.

As a result of this process, case studies on tea and cotton in India and on coffee and flowers in Kenya were agreed with the Producer Networks of Asia (NAPP) and Africa (FTA). However, the POs initially proposed could not participate in the analysis due to the unavailability of staff or other constraints such as time limitations. So, other POs that mostly complied with the selection criteria were proposed by the PNs. In the case of Latin America, Colombia or Peru had been proposed as target countries for coffee and cocoa case studies, but these suggestions were not taken up by the Latin American Producer Network (CLAC). CLAC, based on internal strategies and processes, proposed a banana case study in Panama and a cocoa case study in Costa Rica, which were accepted by Fairtrade International.

Based on this selection process the following case studies were conducted:

1. Banana case study in Panama: Smallholder organization certified under the Small-scale Producer Standard; also certified under Rainforest Alliance and GLOBAL G.A.P.

2. Cocoa case study in Costa Rica: Smallholder organization certified under the Small-scale Producer Standard; also certified organic.

3. Coffee case study in Kenya: Smallholder cooperative

4 This includes staff from Fairtrade International, National Fairtrade Organizations, Producer Networks and FLOCERT.

certified under the Small-scale Producer Standard; no other certifications.

4. Flower case study in Kenya: Company with workers certified under the Hired Labour Standard; also certified under the standard of the Kenya Flower Council (KFC) and the Milieu Programma Sierteelt (MPS).

5. Cotton case study in India: Producer organization certified under the Contract Production Standard; parts of the production also certified organic.[5]

6. Tea case study in India: Company with workers certified under the Hired Labour Standard; parts of the production also certified under Rainforest Alliance standard.[6]

Case study results were summed up in individual reports (see Annex II for executive summaries) and discussed with the corresponding POs and PNs as well as with Fairtrade International.

To arrive at overarching conclusions, methodological, investigator and data triangulation was applied. Triangulation explores the convergence, complementarity and dissonance of results from different approaches, perspectives and sources. All results, i.e. from data analysis and desk research, from the KII and from the case studies were screened, analysed and discussed between the investigators to assess the interaction of the findings from the quantitative and qualitative data collection processes. This led to a systematic mapping of themes across all data sources and showed clear patterns and tendencies as laid out in the results section of this report (Chapter 4).

5 Organic certification is based on the land under production, so the certificate held by a PO may not cover the whole production but a specific area under production (and processing if applicable).

6 Rainforest Alliance production is based on the land under production, so the certificate held by a PO may not cover the whole production but a specific area under production (and processing if applicable).

3. KEY ENVIRONMENTAL PROBLEMS PERCEIVED BY THE PRODUCER ORGANIZATIONS

In all but one case study (cocoa), the key environmental challenges are mostly related to water issues - water scarcity, water contamination, prolonged rainy seasons vs. prolonged dry spells (i.e. absence of water), late onset of rains, irregular and torrential rains. The consequences of climate variability and climate change, although not necessarily named as such, appear to be the most pressing issue across all six case studies for the livelihoods of the producers. Changes in rains sometimes coupled with water scarcity and/or increasing temperatures are shared observations. Another key environmental challenge is deforestation, which has been highlighted as putting further pressure on the local ecosystems and production sites.[7] Ultimately, the POs expect these identified environmental problems to lead to production losses and increases in production costs.

Nonetheless, climate change impacts are site-specific, and the severity of these impacts is clearly linked to the resilience of the local ecosystem. The cocoa case study shows that an integrated ecosystem management as applied by the mostly indigenous members helps to buffer the negative impacts of climate change. The PO has seen a decline in environmental conditions within their communities mainly due to population growth and rising demand for environmental resources. Improved living conditions, such as more, bigger and different homestead constructions or more infrastructure (roads, schools, transport) were achieved at the cost of environmental decline. Increasing instances of flooding and losses in local biodiversity were observed consequences in the region impacting also on their agricultural production. Upon re-incentivizing and reinforcing integrated management practices within their agroforestry systems, the PO said it has been able to buffer such negative impacts.

Table 1[8] sums up the encountered environmental challenges across the six case studies:

Impact	Cocoa	Bananas	Coffee	Flowers	Cotton	Tea
Deforestation		X	X		X	X
Water contamination		X			X	
Changes in rains[9]		X	X	X	X	X
Water scarcity			X	X	X	X
Increasing temperatures	X				X	X

The producer observations confirm global trends as laid out in, for example, the World Bank publication "Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience".[10] The authors, in 2013, projected heat extremes to substantially increase in South East Asia in the near future; indicated declines of 20 to 40 percent in water availability for many regions in Sub-Saharan Africa, South East Asia and South Asia, and highlighted reduced crop yields throughout the same regions. Magrin et al. (2014) indicate changes in rains (start and end of rains, amounts of rains) as well as increasing temperatures (number of hot days and nights) for Central and South America within the Fifth Assessment Report (AR5) by the Intergovernmental Panel on Climate Change (IPCC).[11]

7 Deforestation can also be linked to water scarcity for example if taking place in water catchment areas.
8 For a complete list of environmental challenges see Annex II.
9 This includes changes in the onset and end of rains, amounts of rainfall, erratic and out of season rains and heavy rains.
10 World Bank, 2013
11 Magrin, G.O., 2014

4. THE IMPACT OF FAIRTRADE ON THE ENVIRONMENT, BIODIVERSITY CONSERVATION AND CLIMATE CHANGE ADAPTATION AND RESILIENCE

The Fairtrade Theory of Change[12] (ToC) describes the changes that Fairtrade International wishes to achieve and how the organization intends to contribute to desired immediate, mid-term and long-term changes. The impact hypothesis for environmental protection and resilience is embedded in the overall hypothesis underlying the Fairtrade approach and provided the framework for this study.

The specific impact hypothesis for environmental protection is that the use of the Fairtrade Premium, the implementation of the Standards (specifically the environmental criteria), and support on Standard compliance, environmental training and related projects result in more investment and enhanced knowledge and capacities among producers to protect the environment, to conserve biodiversity and to adapt to climate change (outputs) which ultimately increases environmental protection, biodiversity conservation and adaptation to climate change (outcomes). According to the ToC, environmental impacts are the reduced risk and vulnerability of agricultural production and increased food security of farmers, as well as enhanced environmental sustainability and resilience to climate change of the production base (impacts), leading to secure and sustainable livelihoods (vision). Sustainable livelihoods are defined as the ability to cope with and recover from stresses and shocks and to maintain or enhance capacities and assets, without undermining natural resources. This is why Fairtrade aims to foster sustainable livelihoods among small-scale producers and workers by, among other things, enabling sustainable ecosystems.

Relevant indicators measure the progress towards Fairtrade's objectives. There are seven indicators on outcome level, measuring the outcome "Improved farming performance, protection of environment and adaptation to climate change".[13] Some of these indicators are part of the SCORE and/or CODImpact database and are used for this study. The indicator on impact level[14] is not yet functional due to the lack of a standardized methodology on how to measure it. It was not considered in the study.

The pathway of change for environmental impacts for POs is visualized in Figure 1.

This ToC provided the basis to check the underlying hypothesis and to identify which interventions and areas of change are most critical for the achievement of the desired impacts.[15]

For this analysis the environmental criteria were pre-selected (Section 3 for SPOs and Section 4 for HLOs) and filtered accordingly. This totalled 96,150 answers for all compliance criteria and 2,037 data sets. This does not translate into 2,037 POs audited (as POs within this timeframe underwent several audits) but 2,037 audit results.

The longer a PO remains within the Fairtrade system the more criteria that must be complied with. Fairtrade follows a development approach of building capacities over time.[16] Criteria for SPOs are not as rigid as for HLOs, mostly due to differences in capacities and access to information, and resources of smallholder farmers. To stimulate organizational as well as individual development, some criteria become applicable after one, three or six years under certification.

In SPO Standard v1.5 many environmental criteria are development ones and thus partially applicable only after some time - usually three to six years under certification. For example:

- 3.2.12: The use of personal protective equipment (PPE)

12 Fairtrade International (2016): Journeys to Change. Fairtrade Theory of Change.

13 The seven outcome indicators are: (1) usage of hazardous substances, (2) sustainable water use, (3) Greenhouse Gas reduction/ sequestration, (4) yield for Fairtrade production, (5) barriers to using Good Agricultural Practices, (6) training on Good Agricultural Practices, (7) measures to ensure waste is managed in an environmentally responsible way.

14 Impact indicator: degree of resilience to climate change within PO member and worker communities.

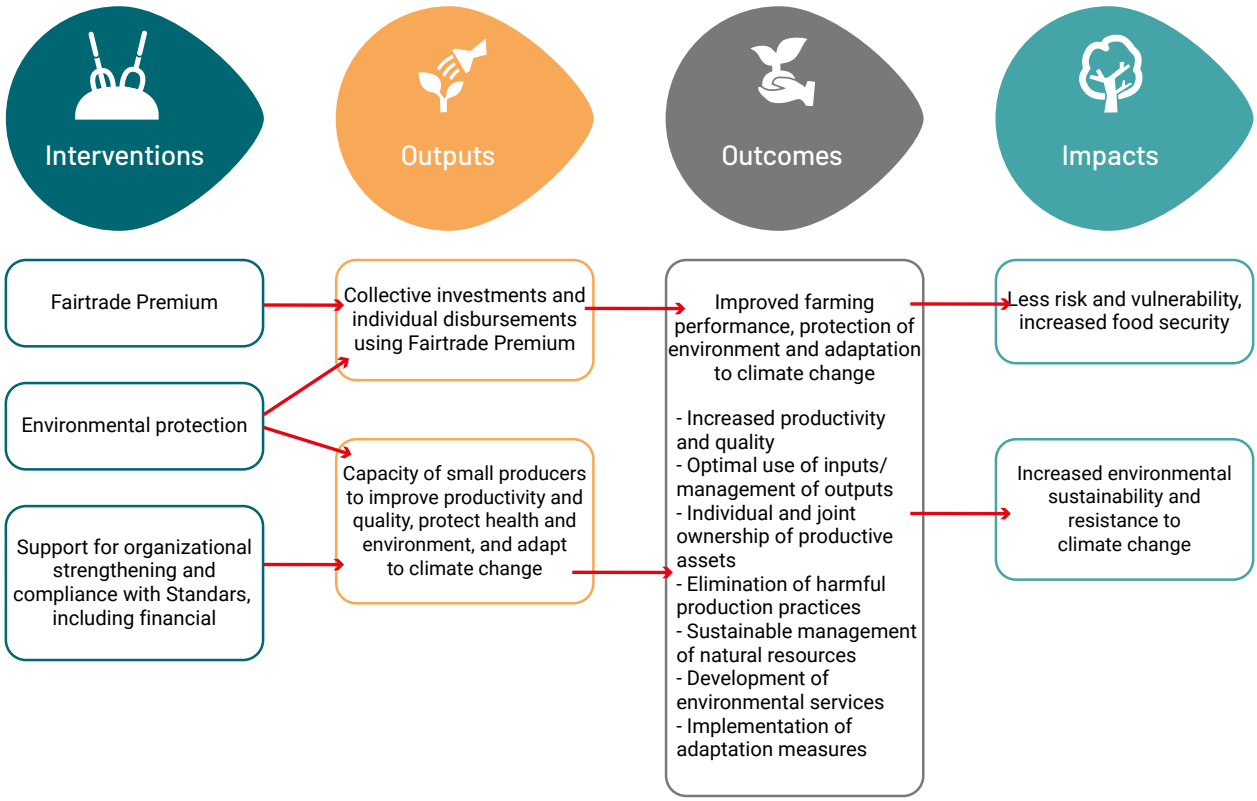
15 Furthermore, learnings from this exercise in terms of need for amendments of indicators and objectives will be fed into the ongoing review of the Fairtrade ToC. in the framework of institutional learning of Fairtrade.

16 See chapter in the standard documents on "Environmental Development"

is only applicable in Year 3; in v2.1 published in April 2019 after public review (due to changes in the order in the new version it is criterion 3.2.5 and no longer 3.2.12) the timeframe (i.e. applicable as of Year 3) remained although the criterion switched from development to core (now 3.2.5).

- 3.2.20: Identification of soil erosion is applicable only in Year 3; in v2.1 the timeframe remained though the criterion switched from development to core.

Figure 1: Extract from Fairtrade's Theory of Change regarding environmental aspects[17] (here for SPOs)



- 3.2.21: Trainings on the prevention of soil erosion are applicable only in Year 6; no changes in v2.1.

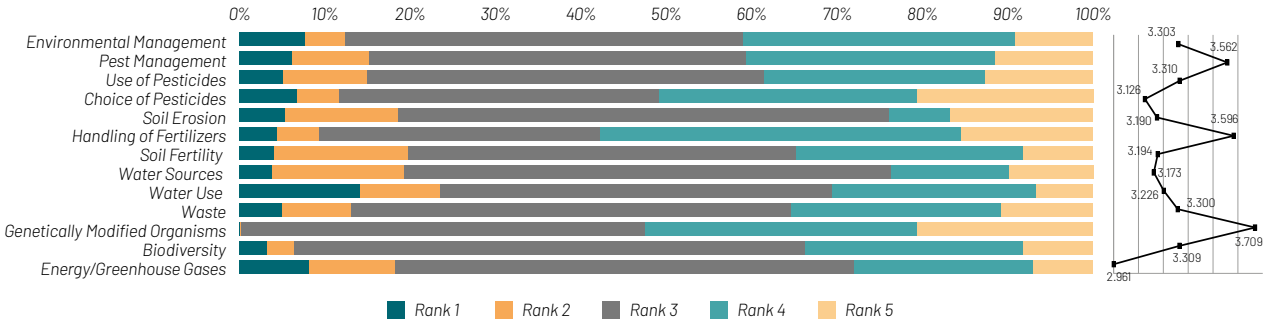
According to the KII, these timeframes are too long and the relevant criteria are not strict enough to ensure sustainable production. For example, after six years, soil strongly affected by erosion is not likely to be very productive anymore. According to the Food and Agriculture Organization of the United Nations (FAO), erosion due to water, i.e. run-off such as that caused by heavy rains, is the main cause of soil erosion. Specifically, land on steep slopes that is not rested or under permanent pasture (e.g. because the land is needed to secure food self-sufficiency or to earn cash income) is at high risk of soil erosion. The land of small-scale farmers within the Fairtrade system more often than not meets these criteria and is thus expected to be at high risk of soil erosion. In the face of climate change, as observed by the POs (see Chapter 3), irregular and excess rains exacerbate soil erosion. A loss of ten percent of topsoil can lead to a 30 percent fall in production. Once erosion channels have formed, run-off water generally follows the same route so that soil loss increases over time. The identification of soil erosion as of Year 3 and trainings to prevent soil erosion as of Year 6 can, therefore, not be considered as effective means for sustainable agricultural production.[18]

According to the SCORE data,[19] the average performance on environmental requirements by SPOs is 3.27, modal value and median is 3. Good performance (i.e. highest percentage of Rank 5 and low proportion of Rank 1 results) among SPOs is achieved within the categories on avoidance of Genetically Modified Organisms, Handling of Fertilizers as well as for the Proper Use and Handling of Pesticides, with notable exceptions (see Figure 2). Notable for this latter category is that although for most compliance criteria

17 *Fairtrade International (2016): Journeys to Change. Fairtrade Theory of Change.*
18 *Compare FAO, Effects of Erosion on the eroded site: loss of productivity.*
19 *For a more detailed analysis of audit results per Standard see Annex III.*

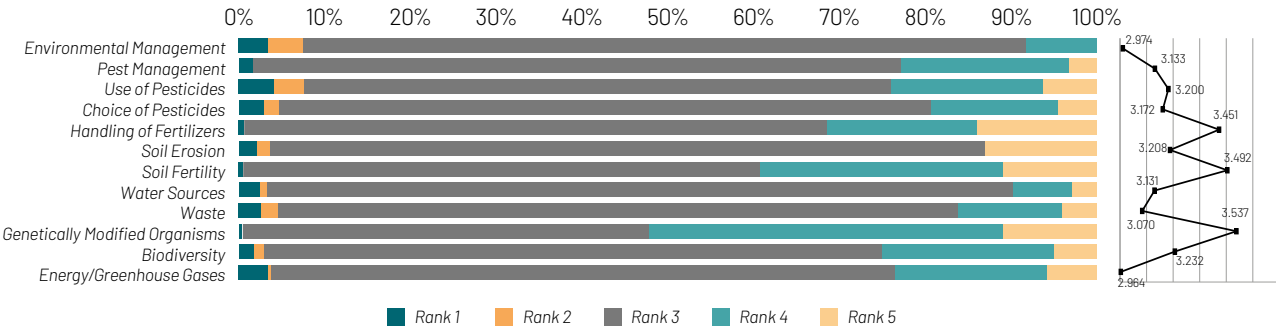
almost a fifth reach Rank 5, the same proportion is only ranked 1 or 2. The main challenges are related to storage facilities, equipment and proper trainings for pesticide use. The soil and water categories achieve almost an average ranking where most compliance criteria display a relatively high percentage of Rank 5 but at the same time a high proportion of Rank 2. Low performance (i.e. highest proportion of Rank 1 and low proportion of Rank 5) among SPOs is observable regarding the Energy/Greenhouse Gases (GHG) Emissions and relevant Trainings and the Choice of Pesticides[20] categories.

Figure 2: Proportion of Ranks within major categories (SPOs)



The average performance by HLOs is 3.19, modal value and median is 3. HLOs achieve best results on Genetically Modified Organisms, Soil Fertility and Handling of Fertilizers (see Figure 3). Rather low results are on Energy/GHG Emissions, Environmental Management and Use/Choice of Pesticides. These results on good and low performance overlap to a large extent with the findings during the case studies regarding the analysis of the specific audit results of the POs involved.

Figure 3: Proportion of Ranks within major categories (HLOs)



Generally, compliance with the environmental criteria cannot be considered a major challenge. Across the 60,407 SPO audit results[21] between 2013 and 2017, 4,453[22] (7percent) non-compliances (i.e. scoring 1 or 2) were detected in the environmental section. Only 123 (2 percent) out of these non-compliances had consequences such

20 *Few answers were available in the SCORE data for this category and these showed mainly low performance.*

21 *This means 60,407 single answers were recorded on environmental criteria between 2013 and 2017; 35,743 for HLOs.*

22 *Including multiple non-compliances during an audit and per PO.*

as suspension or decertification. The remaining 4,330 non-compliances did not have any implications for the SPO. Across the 35,743 HLO audit results, 731 (2 percent) non-compliances in the environmental section were detected, of which only 57 (7 percent) led to suspension or decertification. This indicates a slight trend towards more rigorous consequences of environmental non-compliances among HLOs than SPOs, although even among HLOs this can be considered as minor.

That compliance with the environmental criteria in the Standards is relatively easy is confirmed by the case studies. In neither case study did compliance with environmental criteria present a constraint, according to the POs, and as shown by their respective SCORE data. All but one PO – the coffee PO – held other certifications (e.g. organic or Rainforest Alliance) that, according to the KII and their own brief review of these standards, cover mostly stricter environmental criteria. This is especially true for organic certification regarding relevant production criteria.[23] Therefore, ease of compliance is not surprising. Even in the coffee case study, compliance with the environmental criteria was not seen as a major challenge. Environmental non-conformities varied from five in the initial audit in 2013, to three in 2015 and eight in 2018. They had no consequences for the certification of the PO though.

At the same time, a variation and sometimes decline in environmental performance was detected over time. For example, in the banana and coffee case studies, audit results on environmental criteria were high (between Rank 4 and 5 on average) between 2013 and 2014, and lower in more recent years. On the one hand, this could be linked to having to comply with an increasing number of criteria over time. More criteria to fulfil means less focus on a few criteria and increased complexity. On the other hand, no benefit is related to high scores, thus scoring 3, i.e. "pass", is sufficient, which presents a lack of incentives for maintaining or aiming for higher scores. In the cocoa case study average environmental performance varied between 3.56 in 2013 (renewal audit) to 4.28 in 2014 (surveillance audit), to 3.28 in 2015 (surveillance audit) and 3.58 in 2016 (renewal audit). Specific reasons for such fluctuations were not encountered. They may be linked to sampling of the individual producers visited during the audit.

The main findings regarding the environmental impact of the SPO and HL Standards based on the case studies (SCORE data and participatory assessment) are:

- Flowers:
  - Compliance with the Fairtrade Hired Labour Standard (among other standards) enforces compliance with national requirements, e.g. on wastewater treatment, and vice versa.
  - The potential environmental impact of the Fairtrade Hired Labour Standard (and others) is, in some areas, limited by weak national structures. There is, for example, one accredited collector for chemical containers on a national level in Kenya. This one collector cannot deal with the number of chemical containers in the country and has, therefore, become 'creative' in reducing the amount of waste. According to the KII, this one collector sometimes burns the containers and sometimes sells them to other users who are not aware of the origin or the effect of using such containers. So, even though the requirements of the Fairtrade HL Standard (and others) are complied with, ultimately, the desired impact of less contamination and environmental protection is not achieved due to external factors.
  - Fairtrade compliance allows for a better understanding by farm management of workers' needs and their overall environmental responsibility. The farm invested in beehives around the farm as well as in a fishpond, sheep keeping and a vegetable and maize garden. The bees, for example, serve as pollinators on and off the farm, support a stable balance in the environment and promote biodiversity. Workers can buy fish and vegetables at low prices from the farm. These activities offer economic and environmental benefits.
  - Due to standard requirements (Fairtrade and others) the use of pesticides is controlled and reduced. According to a study by Martina Alig, Kenyan Fairtrade roses use less pesticide than conventional Kenyan roses. This confirms the positive impact of Fairtrade certification on this issue.[24]
- Coffee:
  - Between 2012 and 2018, many of the encountered non-conformities are repetitive, which means some of the non-conformities in 2012 were still, or again, a non-conformity in some of the following audits. Environmental non-conformities detected thus do not seem to receive much attention regarding progress in the next audit nor do they seem to have a consequence for the certification of the producer organization. This overlaps with findings from the data analysis of SCORE data 2013 – 2017 (see above).
  - As a result of complying with the environmental section of the SPO Standard, farmers felt they were better at managing their farms. Measured yield increased per tree from 2.19kg cherries in 2017/18 to 4.07kg cherries in 2018/19. However, fluctuations in

23 80 percent of all Fair Trade products sold in Germany are also certified organic (see http://www.forum-fairer-handel.de/fairer-handel/zahlen-fakten/) and 80 percent of these products are certified under Fairtrade (see http://www.forum-fairer-handel.de/fileadmin/user_upload/dateien/publikationen/materialien_des_ffh/FFH_Entwicklungen_2019_web.pdf). The large overlap between Fairtrade and organic certification is probably linked to the ease of compliance with Fairtrade's environmental criteria for the POs. Organic certification usually focuses on production matters, so on issues such as biodiversity, waste management or greenhouse gases, Fairtrade Standards are likely to be stricter and more comprehensive.

24 Alig, M., 2019

production volume per tree is a natural phenomenon and a good yield can be expected every three to four years. Therefore, this increase can hardly be solely attributed to good agricultural practices as per implementation of the Standard.

- The protection of the local river and the setting up of buffer zones coupled with enhanced and more careful chemical use and disposal of chemical containers were found to support enhanced water quality. Enhanced water quality was also noted during a follow-up study on "The Impact of Fairtrade on Poverty Reduction through Rural Development" by CEval in 2018 in the cases of cocoa in Ghana, cotton in India, flowers in Kenya and tea in India. The study concluded that access to safe drinking water improved (e.g. through Premium investments) and that awareness among Fairtrade certified organizations about preventing water contamination was quite high compared to the level of awareness among non-certified farmers.[25]

- As a result of obtaining Fairtrade certification, organizational structures were developed where missing and strengthened were necessary, which in turn, led to an increase in attractiveness for farmers to (re-)engage with the society. Due to organizational development as per Standard requirements, it was possible to provide relevant trainings (e.g. on the prevention of soil erosion) and services (e.g. the provision of manure) to members that: a) support yield increases, and b) support environmental protection (less contamination). Furthermore, organizational development regarding established responsibilities and transparency as per Standard implementation attracted new partners for collaboration on environmentally relevant topics.

• Bananas:

- No impact on environmental protection, biodiversity conservation and climate change adaptation (solely) related to the implementation of the Fairtrade SPO Standard could be detected. Nonetheless, strengthening organizational structures and more direct contact with buyers than in the conventional market or based on the other certifications is perceived to support environmental protection, climate change adaptation and biodiversity conservation.

• Cocoa:

- No impact on environmental protection, biodiversity conservation and climate change adaptation related to the implementation of the Fairtrade SPO Standard could be detected. This is most likely linked to the fact that the PO held organic certification before obtaining Fairtrade certification and to the existing high environmental awareness among the mostly indigenous members of the PO.

• Tea:

- Environmental impacts that are attributable to the implementation of the Fairtrade Hired Labour Standard could not be detected. The often unintended environmental impacts are mainly due to economic considerations by the company (e.g. reduction of costly fertilizer inputs) and increasingly stricter environmental laws in India (e.g. on watershed protection).

• Cotton:

- In the case of the cotton PO it was hardly possible to disaggregate and evaluate the environmental impacts by: a) Fairtrade Standards, b) engagement on the ground (i.e. trainings in this particular case[26]), and c) Premium use. They are considered to complement each other.

- As a result of obtaining Fairtrade certification, organizational structures within the PO were developed which increased the PO's attractiveness to farmers. Due to the enhanced organizational structures, the PO was able to start its own training and advisory activities offering relevant farming knowledge to its members. Currently, the PO has 15 field staff providing advisory services to the farmers via lead farmers.

- In the KII it was also mentioned that there is a change in the mindset of Fairtrade farmers due to environmental interventions (trainings, advisory services and Premium projects). In India, this appears to be happening in tandem with national laws and relevant governmental support programmes.

Overall, direct environmental impact due to Fairtrade Standard compliance is fairly limited, especially in cases where the producer organization holds other certifications. This is due to the rather soft criteria on environmental aspects, many of them being "development criteria" and only applicable between Years 3 and 6. The new version of the SPO Standard shows improvements in this regard. Examples include the shift from development to core criteria in the environmental section (in v1.5 about 60 percent of the environmental criteria are development and 40 percent core criteria; in v2.1 about 50 percent are development and 50 percent core criteria) and the inclusion of additional aspects such as the prohibition (3.2.31, core criterion as of Year 0) and prevention of deforestation (3.2.32, core criterion as of Year 1) and enhancing biodiversity (3.2.33; development criterion as of Year 6).

Nonetheless, Fairtrade Standard implementation in general led to better organizational structures in half of the case studies. This partly translated into the POs assuming more environmental responsibility, offering relevant services to their members and/or their communities, and into attracting partners for, ***inter alia***, environmental purposes. Therefore, the environmental impacts of Standard implementation

25 Mauthofer et al., 2018, pages 110, 115, 116ff and 118 (water quality) and pages 37 and 109 (yield increases)

26 These trainings, however, were conducted by the PO management and can be only marginally linked to Fairtrade since only a few trainings were co-financed by Premium funds. The main funds were provided by the company.

are, in most cases, not direct, but rather indirect. This corresponds to the findings of a study by Loconto et al. at the Laboratoire Interdisciplinaire Sciences Innovations Sociétés (LISIS) on the use and impacts of the Fairtrade Premium, which concludes:

"Enhanced knowledge and capacity (…) can lead not only to improved farming performance and, as a result, increased environmental sustainability, but in the longer term to improved income, wellbeing and resilience." [27]

4.2 The impact of Fairtrade's engagement on the ground

Fairtrade's engagement on the ground is split into two services:

a) Trainings on environmental topics provided by the Producer Networks.

b) Projects on the environment, climate change or biodiversity initiated by Fairtrade; these projects may be funded either fully or partly by external organizations and may include private, civil society or public partners.

A list of environmental projects was provided as input for the analysis.[28] The list was compiled manually by Fairtrade International and drew on inputs from the Producer Networks and the personal knowledge of individual Fairtrade staff members. Separately established processes for compiling and keeping track of environmental interventions within the Fairtrade system, i.e. among the Producer Networks, the National Fairtrade Organizations and Fairtrade International, do not exist. The list shows 23 projects on environmental topics in Africa and the Middle East, 11 in Latin America and the Caribbean, and 18 in Asia and Pacific. The main target product for environmental interventions, according to this list, is coffee[29] and the most prominent focus is climate change adaptation. Funding for the listed projects comes mainly from the Premium, though particularly in Africa, some larger projects are funded by international donors, such as the Nordic Climate Fund or the Dutch Postcode Lottery. The list is far from complete and has, therefore, not been analysed further.

In addition, a list with 30 climate change adaptation projects[30] was made available which confirms coffee as the priority sector (18 out of the 30 projects focus on coffee POs) and increasing interest among private sector actors to engage with Fairtrade on environmental topics (see below). Twelve projects are (partly) funded by private sector actors and started between 2014 and 2016. Again, this list is incomplete and has not been analysed further.

Another project list made available covered six projects under the Fairtrade Climate Standard, i.e. with the aim of generating carbon credits. Five of these projects focus on energy efficiency by switching from open fire cooking to using energy-saving cookstoves; one focuses on reforestation. These projects prioritize climate change mitigation while offering adaptation co-benefits such as the maintenance of forest cover and resulting shading effects within micro-climates. The list does not offer project start and end dates, although there are some indications that three projects started between 2017 and 2019 and one started in 2015. Due to these rather recent starting points, impacts are not likely to be visible at producer level yet.

It was mentioned in several KII that interest among supply chain actors in investing in environmental projects has strongly increased over the past few years. Some of these projects are included in the provided list, e.g. a climate change adaptation project in the Ethiopian coffee sector between 2018 and 2021 supported by, among others, ALDI Süd and the Finnish coffee roaster Gustav Paulig, and a Coffee Development Plan for Latin America and Africa supported by Nespresso. Furthermore, it was mentioned during KII with supply chain actors, that Fairtrade is not always able to partner up on desired projects due to insufficient capacities (mostly staff time and expertise on environmental issues). Due to a lack of more precise and complete information, it was not possible to establish percentages or the total number of environmental projects within the Fairtrade system. Structures and processes within the different Fairtrade organizations (PN, NFO and Fairtrade International) as well as the Fairtrade system (interaction between the different actors) are not in place to capture and assess such information.

All POs visited for the case studies participated in trainings on Standard implementation and compliance provided by their Producer Networks. None of the POs had participated in specific environmental trainings provided by Fairtrade. The PNs indicate limited capacities, i.e. staff time and financial resources, for "extra activities" despite interest and acknowledgement of the need for action on environmental

27 Loconto et al., 2018, p. 88

28 2018_02_08_List Environmental Information_ms_jr

29 This is not surprising as coffee is the most important Fairtrade product with a correspondingly large number of coffee POs within the system.

30 Consolidated List of Adaptation Projects with Typologies 08_02_19

challenges. During several KII with supply chain actors and PN staff the desire for more expertise and support on environmental issues and, in particular, climate change challenges was highlighted.

The main findings regarding Fairtrade engagement on the ground based on the case studies are:

- The cocoa PO participated in a Standard training that included a brief session on climate change, which was considered a useful introduction. Environmental awareness and responsibility are at the heart of this PO, which is why organic certification was the first certification obtained. Due to this mindset and the organization's location, Fairtrade certification and support for the PO has a clear focus on social and economic aspects.

- The cotton PO is considering participation in NAPP's Climate School Project, which aims to increase the resilience and adaptive capacity of small producer organizations through trainings and subsequent application of insights, skills and techniques at farm level. Discussions at the time of the study were, however, at a very early stage.

- The tea PO has not received any support on environmental aspects from NAPP but has strong ties to the Indian Tea Research Institute (TRI), which offers support on climate change issues.[31]

- The banana PO described trainings on compliance with the SPO Standard and specifically the environmental criteria as beneficial. Although the other certifications held by the PO might be similar and/or even more demanding in the environmental sections, support to fulfil the relevant criteria was lacking. As a result, the PO said the trainings provided by CLAC on the environmental aspects of the Standards were highly relevant and even helped them fulfil the environmental criteria of other certification schemes. Furthermore, the banana PO receives support from CLAC on soil conservation, water harvesting and agritourism. These initiatives support environmental protection, climate change adaptation and income generation, which, in the face of climate change, increases the adaptive capacity and resilience of the PO. The PO is also involved in several initiatives with an indirect link to Fairtrade. For example, due to the high organizational capacities of the PO, they support a local biodiversity protection project[32] with labour. However, the impact regarding biodiversity conservation cannot be attributed to Fairtrade as the involvement of the PO is based moreso on historic reasons and its convenient location.

- The coffee PO has not participated in an environmental project and has not received trainings other than on Standard implementation.

- The flower PO has not participated in an environmental project and has not received trainings other than on Standard implementation.

Overall, hardly any impacts regarding environmental protection, biodiversity conservation and climate change adaptation from Fairtrade engagement on the ground have been found. There are several smaller and bigger Fairtrade supported environmental projects, which undoubtedly do generate environmental impacts. However, specific projects have not been assessed within the scope of this study and are mostly still ongoing. Therefore, environmental impacts of these projects can be expected in the future. Depending on their settings (e.g. partners, funding, implementation structures), attribution of such impacts would have to be assessed on a case-by-case basis.

4.3 The impact of the Fairtrade Premium

During the audits, FLOCERT partially collects additional data, known as CODImpact data, which is provided to Fairtrade International. CODImpact data was available for the years 2014 to 2016 and was assessed particularly to provide insights into Premium use.[33] In these three years 1,235 individual data sets were collected amounting to a total of €363,000 in Premium generated (2014: €106,000; 2015: €120,000; 2016: €135,000).

Between 2014 and 2016 and according to the CODImpact data, 5.44 percent of the generated Premium was invested in environmental aspects.[34] HLOs invested 1.57 percent of their Premium money in environmental aspects; SPOs 6.05 percent. Regarding environmental aspects, HLOs mostly invest their Premium in clean water and sanitation facilities at community level while SPOs prefer to invest their Premium in the provision of fertilizers[35] to farmers and

31 TRI and FAO conducted a study on the impacts of climate change on tea production within the framework of the Working Group on Climate Change of the FAO Intergovernmental Group on Tea. Based on these results the PO developed climate suitability maps for the most climate vulnerable tea estates.

32 See https://www.rewe-group.com/de/newsroom/pressemitteilungen/1632-partnerschaftsprojekt-zum-schutz-der-artenvielfalt-im-tropischen-naturschutzgebiet

33 And for sampling (see chapter 2.2).

34 A list of Environmental Premium Use Categories provided by Fairtrade is the basis for the analysis of respective investment choices by the POs.

35 According to the case studies this is mostly organic fertilizer such as manure, coffee pulp or bio-chemicals from own production.

the renewal of plantations. The least popular environmental related investment among SPOs is on water analysis; among HLOs it is on clean water and sanitation facilities for workers and their families. The latter may be related to the fact that such investments are only necessary when housing is being provided for workers and their families on the farm. In most Fairtrade settings workers are more likely to be living in the nearby communities.

Looking at the three Fairtrade regions, the highest investments in environmental aspects are found in Asia and Pacific (7.79 percent), followed by Latin America and the Caribbean (6.12 percent) and Africa and the Middle East (2.05 percent).

Figure 4: Overview of Premium investments in environmental aspects by SPOs and HLOs

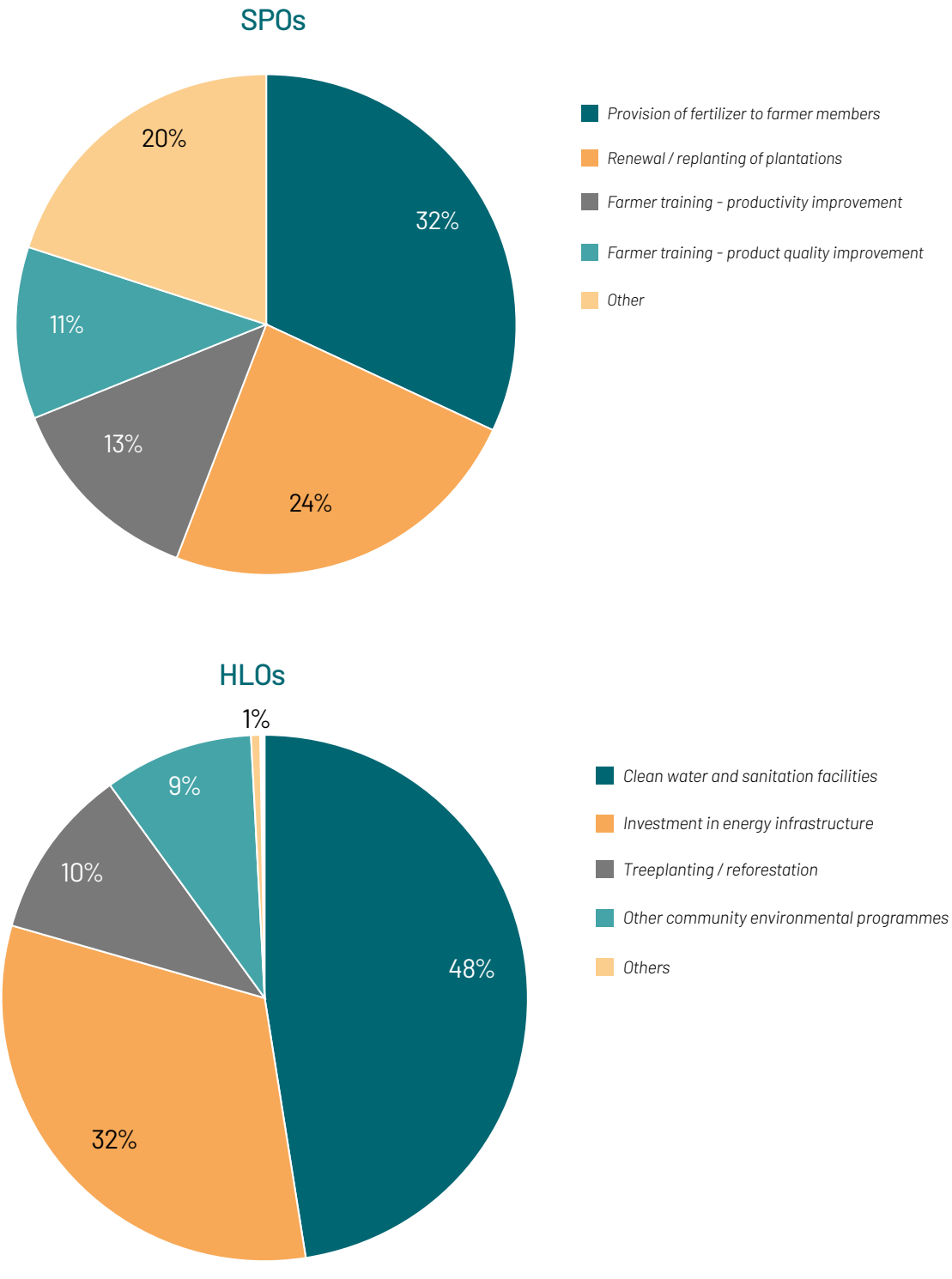


Table 2: Premium investments on environmental aspects per region.[36]

Africa & Middle East[37]	Asia & Pacific	Latin America & Caribbean
Top three investment choices (in order)		
Provision of fertilizers to farmer members	Provision of fertilizers to farmer members	Provision of fertilizers to farmer members
Renewal/replanting of plantations	Renewal/replanting of plantations	Renewal/replanting of plantations
Clean water and sanitation facilities (community level)	Clean water and sanitation facilities (community level)	Farmer training - productivity improvement
Least favoured investments options (in order)		
Clean water and sanitation facilities for workers and their families	Crop spraying programmes	Irrigation demonstration and promotion
Water analysis	Irrigation demonstration and promotion	Water analysis
Irrigation demonstration and promotion	Water analysis	Clean water and sanitation facilities for workers and their families

The top two investment choices on environmental aspects for Premium funds are the same across all three regions: "Provision of fertilizers to farmer members" and "Renewal/replanting of plantations". According to the case studies, provision of fertilizers is mostly related to organic inputs such as manure, coffee pulp or bio-chemicals from the PO's own production. Substituting agrochemicals contributes to environmental protection, biodiversity conservation and climate change adaptation. In Africa and the Middle East and Asia and Pacific, the third top investment choice is "Clean water and sanitation facilities (community level)" while in Latin America and the Caribbean it is "Farmer training on productivity improvement". The least favoured options also show quite some overlap: "Water analysis" and "Irrigation demonstration and promotion" are common between all three regions, and "Clean water and sanitation facilities for workers and their families" are common in Africa and the Middle East and Latin America and the Caribbean.

Across the case studies, the Premium generated and its use differ quite substantially. Due to the different settings of the producer organizations (SPO and HLO), the different sectors (coffee, tea, cotton, flowers, bananas and cocoa) and relevant market dynamics (e.g. demand and uptake of Fairtrade products and price fluctuations) Fairtrade sales varied significantly between the POs.

The more produce that is sold into the Fairtrade market, the more Premium that is generated. Across all six case studies Premium investments in socio-economic aspects are clearly preferred over environmental aspects. This corresponds to findings of the study by Loconto et al. (see Chapter 4.1), which found that Premium investments in aspects such as human resources, infrastructure or education services (school fees) have clear priority.[38]

The banana and the cotton POs earn the highest Premiums among the case studies as they sell the largest percentages of their production into the Fairtrade market. The cotton PO invests around eight to 15 percent (amount in euros unknown) in environmental aspects; the banana PO up to 35 percent in 2017 amounting to €280,000. In the other case studies, it was not possible to define percentages of Premium investments in environmental aspects as these were not separately assessed but rather covered under "other" or "miscellaneous". Nonetheless, the KII as well as the FGD mentioned some environmental investments including:

- Cocoa: Covering organic certification costs - the PO had been organic certified before obtaining Fairtrade certification; the Fairtrade Premium supports the maintainance of the organic certification although attribution of environmental impacts due to organic certification is not possible in this case.[39]

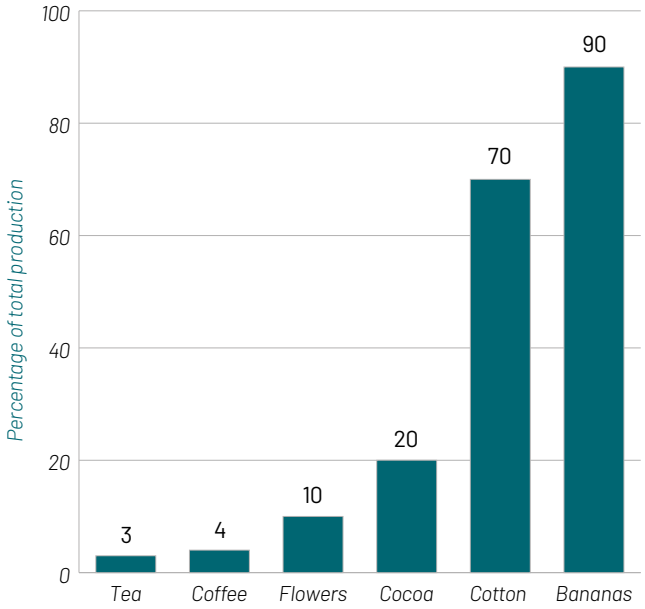
36 See Annex for full list.

37 In the case of Africa and Middle East, eight investment categories were not chosen at all. The "Least favoured investments options" listed do not cover all of these – see Annex for full list.

38 Loconto et al., 2018, p. 34

39 This might be different in the case where Fairtrade certification enabled organic certification.

Figure 5: Fairtrade sales per PO



•Tea: Premiums are mainly invested in communal infrastructure, educational purposes, household goods and materials; some investments were highlighted as having environmental co-benefits, such as energy saving stoves and LED lighting, although their main focus was on reducing expenditures or substituting more expensive inputs.

• Flowers: Part of the Premium is invested in an on-farm nursery for native and exotic trees (whether the latter produces positive impacts on the local biodiversity could not be assessed within the scope of this study); tree planting takes place on the farm as well as in the communities enhancing, for example, local biodiversity and the micro-climate.

• Coffee: Parts of the Premium are invested in the construction of metallic drying beds for coffee processing thus reducing tree cutting for wooden drying tables, and in the provision of manure thus substituting chemical inputs and enhancing soil fertility.

• Bananas: Since the General Assembly in 2016, 25 percent (prior to that 30 percent) of the Premium has been invested in production and ten percent (prior to that 20 percent) in environmental aspects. This means that in 2014 more than €300,000 in total was invested in relevant aspects; in 2015 over €400,000; in 2016 about €300,000 and in 2017 about €280,000. The main investment in the area of production is renovation of old plantations, which is a key factor in climate change resilience. The main investment regarding the environment is in the buying of land for reforestation purposes. This serves to maintain, strengthen and re-connect biodiversity corridors in the region. The outlook on impacts from these investments is promising.

• Cotton: Since 2011, the PO invested Premium money in the production and provision of vermicompost and bio-pesticides, in the plantation of fruit trees and vegetables, in 100 biogas plants and water drums for drinking water at individual household level, in open well recharge and borewell recharge systems to collect the surface water and recharge existing wells for irrigation purposes as well as in pipes for irrigation. Most of these investments were co-financed or highly subsidized by Indian state funds for agricultural development.

Overall, the case studies brought up two main findings:

1. The crucial question is: who benefits from the investment? In the case of HLOs, workers hardly benefit from investments in environmental or production related aspects. As they decide upon Premium investments, funds assigned to the environment and production are marginal. In the case of SPOs, the producers see a direct return on investments related to the environment and production and willingness to invest parts of the Premium in these aspects seems higher.

2. The higher the Premium earned, the more likely investments in environmental aspects are. If enough funds are available socio-economic as well as environmental investments are made. This means that once socio-economic needs are catered for, Premium investments in environmental issues are more likely. The corollary also holds true: the lower the Premium earned, the less likely investments in environmental aspects are.

The impacts of Premium investments as listed above are rather limited due to the fairly small amounts which, in turn, are related to limited Fairtrade sales in most of the case studies. The banana case study seems to be an exception and the outlook on impacts from the PO's Premium activities on environmental and production aspects is promising, specifically regarding climate change adaptation

and biodiversity conservation.

4.4 The aggregated impact of all three intervention options

The data analysis, the interviews and the case studies show that Fairtrade interventions have the potential to contribute to generating positive impacts regarding environmental protection, biodiversity conservation and climate change resilience. Depending on the setting and background (e.g. products sold, type of organization, other certifications, percentages sold as Fairtrade, etc.), the achieved and potential environmental impacts may differ.

Throughout the case studies environmental factors and relevant interventions have been assessed. The factors looked at were pre-defined based on the methodology as laid out in the Inception Report. They are not measurable indications of environmental protection, biodiversity conservation and climate change resilience, but considered aspects feeding into these desired impacts. Interventions found at the level of each PO have been assessed regarding their influence on these environmental factors. The combination of the two (relevant environmental factors and interventions) sums up the perceived aggregated impact of Standard implementation, Premium payments and support received.

Table 3 offers an overview of the perceived top environmental factors and interventions per case study.[40]

Table 3: Overview of the perceived top indicators and interventions per case study

PO	Best performing factors	Most relevant interventions by the PO
Bananas	1. Reduced impacts of environmental degradation 2. Reduced impacts of climate change 3. Reduced impacts of changes in biodiversity	1. Renovation (partly funded by Premium) 2. Production and provision of bio-chemicals (hardly Fairtrade related) 3. Precision agriculture (not Fairtrade related)
Cocoa	1. Soil fertility 2. Educational level in the family 3. Reduced impacts of environmental degradation 4. Reduced impacts of changes in biodiversity	1. Production and provision of bio-chemicals (hardly Fairtrade related), cocoa seedlings and agricultural tools (hardly Fairtrade related) 2. Demonstration plots (hardly Fairtrade related)
Coffee	1. Reduced impacts of environmental degradation 2. Soil fertility 3. Coffee yields	1. Reduced and correct chemical use (due to SPO Standard) 2. Buffer zones (due to SPO Standard) 3. Trainings, exchange tours and input provision (due to SPO Standard → organizational strengthening)
Cotton	1. Cotton yields 2. Access to agricultural inputs 3. Reduced impacts of environmental degradation	1. Organic farming (due to CP Standard, training and Premium use) 2. Reduced soil erosion (due to CP Standard and training)
Flowers	1. Reduced impacts of environmental degradation 2. Reduced impacts of climate change	1. Chemical bans and monitoring (due to HL, KFC and MPS Standards) 2. Tree planting (shade and banana, funded by the Premium)

40 *See the individual case study reports for more detailed information.*

PO	Best performing factors	Most relevant interventions by the PO
Tea	1. Tea yields 2. Reduced impacts of pest and disease attacks 3. Reduced loss of biodiversity	1. Tree planting (not Fairtrade related) 2. Environmental awareness (hardly Fairtrade related)

The best performing environmental factor, according to Table 3, is the reduced impact of environmental degradation.[41] However, looking at these results, the interventions that impact on environmental factors are hardly related to Fairtrade. In many cases interventions related to Fairtrade may be perceived as highly relevant but, in fact, have a very limited scope. Examples here are the tree planting in the flowers and tea case studies. The amount of Premium dedicated to planting trees (and maintaining a nursery) in the case of the flowers case study was so small it was not even explicitly recorded within Premium expenditures. Tree planting on the Indian tea farm is mostly supported by the government; NAPP offers minor additional support in terms of environmental awareness raising through the trainings on Standard implementation.

This leads to the conclusion that interaction between the three interventions seems crucial to achieving environmental impact. If all three interventions reach a PO, environmental impacts are more likely than if only one or two interventions are applied. In some cases, as shown in the banana case study for example, this is working out well; in others it is not. In the case of the banana PO, Standard compliance has led to the strengthening of organizational structures, the PO has good and frequent contact with CLAC, they receive support on Standard implementation and other environmental activities (see Chapter 4.2) and generate high Premium earnings. Therefore, the potential for environmental impact is quite high. In contrast, changes or impacts due to Standard compliance in the case of the cocoa or the tea POs have not been found. They both receive limited Fairtrade support, mostly through Standard trainings, and both earn low Premium payments. Therefore, the potential for environmental impact due to Fairtrade is marginal.

This interplay between the different intervention options (Standards, support and Premium) with regard to environmental impacts is spelled out in the Theory of Change and potentially reflects the biggest gap. Each intervention by itself seems too weak to make an environmental impact but, as shown in the case studies, having all three interventions perform well seems to be an exception.

4.5 Non-intended impacts

Hardly any non-intended impacts of environmental interventions have been found – either in the case studies, the desk study or the KII. In cocoa and cotton there were no indications of non-intended impacts. The analysis of the other case studies provided the following insights in this regard:

- Coffee:
  - During one KII with PN staff a link between social and economic development and environmental degradation was mentioned. Taking care of humans (empowerment) seemingly often leads to the same people no longer taking care of their environment. Their needs are met and efforts to care for the environment so it delivers agricultural produce are no longer necessary.
- Bananas:
  - The economic side effect of organic fertilizer production and soil conservation practices are reduced costs for agrochemicals. This, however, is an expected and intended effect.
  - The effect of dropping plastic waste, including chemical containers, at a local recycling company is that contaminated material is being incorporated into building materials. The pollution effects of this are unknown.
- Flowers:
  - Tree planting on the farm has attracted more birds that control pests such as moths or butterflies. Due to this, the risk of rejection of sold lots has reduced as some caterpillars are quarantine pests. This presents a non-intended economic side effect of a clearly environmentally oriented intervention.

41 Environmental degradation is the deterioration of the environment through depletion of resources (air, water and soil); the destruction of ecosystems; habitat destruction; the extinction of wildlife, and pollution.

- Tree planting on the farm has attracted more birds that apparently attack the roses within the greenhouses. As a result, bird nets have been installed which led to extra costs. This is an adverse economic effect of a clearly environmentally oriented intervention.

- Tree and banana planting in the communities leads to additional income through banana production for the workers and their families. This is an economic side effect that was considered during the selection process of suitable species for tree planting in the region and was therefore intended.

- There is one national collector of chemical containers. This one collector cannot deal with the number of chemical containers in the country. According to the KII, the collector partly burns the containers (thus still pollutes) and sometimes sells them to other users who are not aware of the origin or the effect of using such containers. So even though the requirements of the Fairtrade HL Standard (and others) are complied with, ultimately, the desired impact of less contamination and environmental protection is not achieved due to external factors. This is an unintended negative impact. The need to dispose of the containers properly produces a need for further treatment or processing of the containers that is not covered by national structures. Standard implementation in this case reveals the development needs of national structures.

• Tea:

- In the KII (PO interviews) it was reported that the Fairtrade Premium created some envy in neighbouring worker communities, which were not under the Fairtrade scheme but belong to the same producer organization. Only those workers in sectors under Fairtrade receive support via Premium projects. This aspect, however, is not environmentally specific but, depending on the Premium investments, could become environmentally relevant.

Overall, environmental impacts attributable to Fairtrade are rather limited. In many cases socio-economic impacts are the driving motivation for interventions that may also have environmental impacts (co-benefits). Rather than environmental interventions bringing about non-intended social or economic impacts, it is the other way around. Premium investments in, for example, metallic drying beds (coffee), in LED lighting (tea), or in renovation are based on economic considerations and, in addition, serve the aims of environmental protection, climate change adaptation or biodiversity conservation. This leads to the conclusion that economic incentives are crucial for generating environmental impacts and not vice versa.

4.6 The role of gender

According to the case studies, gender aspects only have a minor influence in generating environmental impacts. Some relevant interventions may be carried out by men, such as nurseries, which, in the case of the coffee PO, are maintained by men; others may be carried out by women, such as using energy saving cookstoves (tea and coffee). In the banana and flower case studies men perform the majority of the relevant environmental activities. This is either due to the division of tasks (flowers) or the fact that women are hardly involved in the PO (bananas). Nonetheless, across all six case studies it was emphasized that men and women benefit equally from environmental interventions and that both should be considered in relevant sensitization efforts or trainings. Furthermore, the importance of young people and their inclusion in any related activity was highlighted.

Interdependencies or links between gender and environmental performance could not be found by the analysis of data[42] provided by Fairtrade's Monitoring, Evaluation and Learning unit either. In order to examine the correlation between environmental and gender aspects, the data sets have been searched for questions relating to either aspect. Unfortunately, these aspects were not covered explicitly in the relevant surveys and the relevant questions were few. SPOs were ranked according to the proportion of female members, female salaried staff, female board members and female committee members. Households were screened for female decision makers. Environment is not an explicitly covered topic in the Impact Monitoring surveys. Therefore, the results of specific questions (e.g. on replanting and rehabilitation or on environmental conservation) were screened. Overall, the data set is not sufficient to answer the question on links between gender and environmental performance reliably. Data entries are incomplete and the data set is quite small (11 sampled SPOs in 2016 and ten in 2017; 461 households in 2016 and 394 in 2017).

42 *Impact Monitoring Questionnaires and Data 2016 and 2017 at SPO and household level.*

During the KII, three actors (out of 27 or 11 percent) considered women more receptive and open to environmental topics and thus more relevant. This concurs with the United Nations Environment Programme, which states:

> *"Women play a critical role in sustaining communities and managing natural resources, but their contributions are often undervalued and neglected. Women are also more likely than men to live in poverty, and they are more vulnerable to the impacts of climate change and other environmental hazards, especially in developing countries."* [43]

Gender is certainly an important factor regarding environmental aspects when it comes to access to and control over land and natural resources. However, these factors have not been mentioned throughout the case studies or the KII.

Not having detected a correlation between environmental impacts and gender within this study might be related to the fact that most encountered environmental interventions and related impacts are: a) rather small, and b) not necessarily targeting environmental but rather economic issues that offer environmental co-benefits (see Chapter 5).

43 *See https://www.unenvironment.org/explore-topics/gender/about-gender*

5. CONCLUSIONS

Studies looking at environmental impacts of sustainability standards (such as Fairtrade) found some evidence of positive effects. A study conducted by Smith in 2010 concluded that Fairtrade certification has direct positive impacts on the environment through Standard implementation, Premium use and the Fairtrade Minimum Price for "Fairtrade Organic" products, which all led to wider community engagement on environmental aspects. She also found indirect impacts of Fairtrade certification on natural resource management.[44] The cotton and banana case studies specifically, with all three interventions, confirm wider community engagement on environmental aspects and positive environmental impacts. However, in the other case studies, where the different interventions did not or only partly perform, no evidence was found in this regard.

According to Komives et al. (2018), the impact of voluntary sustainability standards on biodiversity is rather positive. This result is based on a review of studies and approaches of several standards, including Fairtrade. Evidence confirming this has been found in the cotton and banana case studies, specifically with regard to Premium use. Evidence in other case studies to support this finding has not been found.

The three types of Fairtrade interventions have the potential to contribute to generating positive impacts regarding environmental protection, biodiversity conservation and climate change resilience. The interaction of the three interventions (Standards, support and Premium) is crucial to achieve environmental impact. The individual interventions by themselves generate hardly any environmental impact.

Regarding Fairtrade's Theory of Change, the causal relation between the Fairtrade Standards (output) and increased environmental protection and adaptation to climate change (outcome) is quite vague. It is based on the assumption that the Standards and their criteria are meaningful and focused on the essence of environmental protection, climate change adaptation and biodiversity conservation for the given context. Many environmental criteria are, however, development criteria and thus only to some extent binding (see Chapter 4.1). Moreover, the set of environmental criteria is quite generic and unspecific since it applies worldwide and for all sectors/products (with minor exceptions of some product-specific criteria). Target values or thresholds (e.g. for pesticide use) are hardly provided leaving many environmental criteria at process level (monitor, report, plan). Criteria on climate change adaptation at farm level as well as biodiversity protection have been strengthened/included in the new SPO Standard v.2.1, which is certainly a step in the right direction.

The above-mentioned impact hypothesis between the Fairtrade Standards (output) and increased environmental protection and adaptation to climate change (outcome) could only be verified to a limited extent in the six case studies carried out. The main environmental impact relating to Standard implementation was brought about by organizational strengthening as per the chapters "General Requirements", "Trade" and "Business and Development" in the Standards. In half of the case studies this led to increased environmental awareness and responsibility taken on by the POs as well as to the POs being considered trustworthy partners in environmental interventions by other private and civil society actors. Nonetheless, the attribution of positive (and negative) environmental impacts to Standard implementation is possible only to a minor extent. The corollary also holds true: there is little to no evidence that Standard implementation of environmental criteria has contributed to environmental impacts.

The coffee case study was the only PO that did not hold other certifications. According to the farmers, the main change brought about by the implementation of the Fairtrade Standard for Small-Scale Producer Organizations (SPO) regarding the environment, biodiversity or climate change resilience was the protection of the local river and the introduction of buffer zones. Farmers associated this activity with enhanced water quality in the area. In addition, due to the Standards' requirements, chemical use and the disposal of chemical containers improved drastically alongside the introduction of personal protective equipment (PPE) when spraying.[45] In the absence of other certifications, positive impacts on environmental protection, biodiversity conservation and climate change adaptation based on the implementation of Fairtrade Standards are, therefore, more likely.

During the Indian tea case study, the auditors reportedly had challenges interpreting the Standard criteria in a uniform way. Presumably, this was due to the lack of consistent training for all certifiers on environmental criteria.

The causal relationship between the use of the Fairtrade Premium (output) in order to increase environmental protection and adaptation to climate change (outcome) is based on the assumption that farmers and producers recognize the importance of environmental issues for their livelihoods and, thus, prioritize such investments. As shown in Chapter 4.3, this is hardly the case. If environmental investments are projected to result in economic gains

44 Smith, 2010

45 Surprisingly the relevant criterion (3.2.2.07) was checked during the audit in 2015 and in 2018. Only in 2018 was a non-conformity detected on the use of personal protective equipment (PPE) and not before. In 2018, interviewed members recognized that such equipment is not used at all times as it is not available to all. This may be due to the fact that more farmers joined the organization and implementation of all criteria with new members is an ongoing process.

(increased yields, higher quality and market value, additional alternative income or lower production costs) and if these positive impacts are known to the farmers, the willingness to invest especially in low-cost high-impact environmental investments (e.g. shade trees) is relatively high. Additionally, if co-finance options exist that foster individual or collective investment in environmental related measures, like the governmental programme MGNREGA[46] in India which provides subsidies for "green" investments, the chances are higher that environmental investments will be made. Due to those restrictions, the attribution of positive (and negative) environmental impacts to Premium use is limited. Nonetheless, there is some case by case evidence that Premium use has contributed to environmental protection.

The causal relationship between support (trainings and projects) to enhance the capacities of farmers/workers (outputs) and their use for increased environmental protection and adaptation to climate change (outcome) is based on the assumption that such interventions target the needs of farmers/workers on environmental issues. The only Fairtrade related trainings encountered in the case studies were those on Standard compliance provided by the PNs. No further or more specific trainings were offered by Fairtrade on how to comply with environmental criteria in the specific region or the specific sector/product. Thus, the trainings remained very generic. In the case of the banana PO, on the other hand, the Standard trainings met the expectations of the PO. They described them as beneficial even with regard to the implementation of environmental criteria of other standards. In the cotton case study, the company engaged in trainings on Good Agricultural Practices using a Training of Trainers approach with the objective of converting the whole production to organic.

A further assumption is that other inputs (e.g. financial support, technical capacities) are available to facilitate concrete action. Among the case studies, additional Fairtrade related initiatives supporting the POs with regard to environmental aspects were hardly encountered. However, lists of environmental and climate change adaptation projects, as well as the KII, confirmed relevant projects. Most of these are rather recent and, to a large extent, still ongoing. Therefore, impacts have not yet been generated. Ultimately, the assumptions and hypothesis around support cannot be confirmed by the analysis.

Overall, the main conclusions of the assessment can be summed up as follows:

- The stronger the organizational capacities of the PO, the more likely the achievement of environmental impact through Fairtrade interventions.
- Socio-economic benefits trigger Premium investments in environmental aspects; within SPOs the business case to invest in environmental topics is greater than in HLOs.
- The higher the Premium earned, the more likely investments in environmental aspects are. If enough funds are available socio-economic as well as environmental investments are made.
- The three Fairtrade interventions offer opportunities for POs to work towards environmental impact but do not necessarily encourage environmental actions.
- Of the three interventions (Standards, support, and Premiums), Premiums are considered the best and strongest option for generating environmental impacts. The Standards present the basis for any type of intervention. In the absence of other certifications, implementation of the Fairtrade Standards probably generates some environmental impacts.[47] In the presence of other certifications, especially organic, implementation of the Fairtrade Standards adds little extra benefit regarding environmental impacts. Fairtrade engagement on the ground is a powerful approach where funds and staff time are available. Unfortunately, these are limited.
- Fairtrade is hardly perceived as an environmental approach although, according to the KII with internal and external stakeholders, environmental aspects within Fairtrade approaches are important and could probably be strengthened.[48]
- Environmental topics are hardly reflected at organizational level. Structures and processes within the different Fairtrade organizations (PN, NFO and Fairtrade International) as well as the Fairtrade system (interaction between the different actors) are barely in place to capture and assess environmental interventions and their impacts. Knowledge is available with individual staff members but not institutionalized.

These findings coincide with the finding of Loconto et al.:

> *"Environmental issues related to Fairtrade certification (e.g., sustainability of natural resources, integrated crop management) remained abstract concepts to many interviewees, while their knowledge of economic and social aspects was quite well developed. This supports the conclusions of recent studies (Haggar et al., 2017; Pyk and Abu Hatab, 2018), which found that despite the inclusion of environmental components as roughly one-third of the criteria in the Fairtrade Standards, the core focus on support efforts*

46 The "Mahatma Gandhi National Rural Employment Guarantee Act" is a governmental programme, enacted in 2005, which, apart from providing economic security and creating rural assets, supports protecting the environment, e.g. improved water management.

47 This is also highly dependent on national environmental laws and regulations; where these are high, the impact of Fairtrade might be rather low.

48 KII were conducted before publication of v2.1 of the SPO Standard, which includes stronger environmental criteria. Whether these fulfil the expectations of the interviewed stakeholders is unknown.

from Fairtrade International is on guaranteed price, Premiums, labour rights, and community development."[49]

According to the analysis, the following factors limit environmental impacts by the implementation of Fairtrade Standards, by Fairtrade's engagement on the ground and by the use of the Fairtrade Premium:

- Environmental criteria, despite making up about one third of the criteria in the SPO and HL Standards, are neither tailored to meet location- and product-specific needs nor strict enough (no target value/thresholds, development vs. core criteria; see Chapter 3.2.1). To a large extent they only apply as of Year 3 or even Year 6 of being certified. The new version of the SPO Standard includes changes in the right direction to achieve environmental impact, although there is still potential for more environmental ambition.

- Fairtrade's engagement on the ground largely depends on the Producer Networks. Their staff time and their financial resources are limited, and environmental aspects are not their top priority despite acknowledging the need for action, e.g. on climate change adaptation or soil conservation. Therefore, trainings, to a large extent, focus on Standard implementation and internal procedures.

- Projects require funds and staff time. In order to access funds from third parties, requirements have to be met and proposals have to be written. Lengthy and complex proposal procedures do not fit the staffing reality in most Fairtrade organizations. At the same time, international funds, in most cases, aim for large-scale interventions. Working with Fairtrade POs means working in small-scale settings and looking for local and location-specific solutions. Therefore, Fairtrade POs can only apply for such international funding opportunities when proposals are grouped, e.g. several POs in several countries. This, again, entails enormous preparation and communication efforts upfront. All these present barriers of entry to accessing funding opportunities.

- The impact of the Premium use as well as the indirect impacts of organizational development strongly depend on the internal choices of the PO. Social and economic aspects are favoured by the POs when it comes to determining how the Premium is used. Indications on how to invest the Premium, such as percentages directed to certain topics (e.g. social, economic, environmental), do not exist.[50] Additionally, environmental criteria are rather weak in the participatory prioritization process on Premium use.

- The lack of processes and structures on environmental aspects within the Fairtrade system presents a bottleneck and potential inefficiencies. Whenever the need arises information is gathered individually in an *ad hoc* manner and is not made available to other Fairtrade actors (individual staff and other organizations) systematically.

49 Loconto et al., 2018, p. 88

50 For HL settings best practice recommendations do exist (see https://files.fairtrade.net/standards/2014-03-31_Ex_Doc_FPC_EN.pdf), although these are not binding.

6. RECOMMENDATIONS

In order to broaden Fairtrade's impact on environmental protection, biodiversity conservation and climate change adaptation, interventions on several levels could be considered.[51]

Interventions at PO level:

1. Offer guidance to prioritize Premium projects that are economically viable and at the same time have environmental co-benefits, e.g. tree plantations or reduction of inputs (energy, pesticides, water, etc.); implement best practices for Premium use (which already exist for HL settings).

2. Consider climate change and its impacts more strategically (i.e. climate change projections and trends) through, for example:

   - risk assessments (already part of SPO Standard v2.1)
   - suitability maps (projections on future risks)
   - adaptation plans (and mitigation targets)
   - consideration in the business plan

3. Collaborate with specialists and technological entities (especially national agricultural research centres, meteorological institutions and governmental agencies) to complement advisory services (e.g. climate change projections, research) and to increase the flow of funds into environmental projects.

4. Continue encouraging organic farming (e.g. through a high Minimum Price and Premium for Fairtrade organic products) and control of soil erosion among members/ workers since this increases environmental resilience and at the same time improves livelihoods and income.

5. Focus more on diversification of production systems/ value chains to spread the risk of production failure and link up such work with Fairtrade's Living Income Strategy workstream.

6. Influence communities on a broader scale (beyond individual members) to increase water harvesting (e.g. water catchment management) and to reduce environmental degradation and loss of biodiversity.

Interventions at PN level:

1. Have an Monitoring and Evaluation (M&E) system in place which tracks impacts and not only activities or criteria. This is relevant for environmental projects and for all Fairtrade interventions. A first step could be to establish baselines, e.g. through risk assessments as encouraged by the SPO Standard v2.1. Building in a review process of such risk assessment results every three years (i.e. for every renewal audit) would allow for tracking change.

2. Further strengthen capacities (staff time and expertise) on environmental topics, specifically on climate change adaptation. This can be done by internal trainings and webinars and ensuring everyone knows where to access relevant information and materials.

3. Increase the awareness of POs that climate change might be a risk for their business model (i.e. the value chains that they are currently focusing on). This can be done by including relevant sessions in Standard trainings.

4. Further encourage organic farming and crop and income diversification.

5. Build up capacities for looking/applying for external (co-)funding (national or international) to complement Premium funds.

6. Facilitate exchange on environmental needs and challenges among producers across different countries, continents and sectors. WeFarm (https://wefarm.co), the world's largest farmer-to-farmer digital network, may serve as an example or even partner in such an endeavour.

7. Influence communities on a broader scale to create an environmental impact beyond PO level.

8. Facilitate strategic partnerships with environmental research or financing bodies and connect these to relevant POs.

Interventions at the level of Fairtrade International and National Fairtrade Organizations:

1. Strengthen the ToC regarding the interaction of the different intervention options based on a strategy for environmental protection and highlight this interplay across the Fairtrade system.

2. Build up internal structures and procedures to: a) record environmental activities, and b) share relevant records, results and lessons learnt across the system.

3. Screen for best practices on environmental impacts and share these across the Fairtrade system. Elaborate them bit by bit based on project experience, training experience, Premium use experience and Standard implementation experience.

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51 Recommended interventions are ranked to facilitate easier prioritization in case of limited time and resources.

4. Screen for business cases of environmental interventions and share these across the system. The Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and the International Trade Center (ITC) work on similar approaches that might offer potential for teaming up.[52]

5. Compile and avail of climate change information (impacts, projections, adaptation examples, etc.) across the system. There is an ongoing climate change study; its results could be used to kickstart such a process.

6. Address environmental issues, and especially climate change adaptation, more strategically through:

   - trainings/sensitization sessions for staff particularly on climate change and its impacts on agricultural smallholder production systems.

   - specific compliance criteria; as shown in Chapter 4.1 improvements have been achieved in v2.1 of the SPO Standard. However, looking at more demanding criteria on the prevention of soil erosion and a shorter timeframe for complying with criteria on sustainable water use in particular would be beneficial. Thresholds or target values going hand in hand with water and soil analysis could also be included.

   - relevant training modules for farmers and workers; the latter could include standardized introductory sessions on what climate change is, what impacts it has on agriculture/specific crops and which options exist to confront these challenges. In a project focusing on cocoa in West Africa such training modules are already being developed. In 2016, Kerstin Linne, on behalf of Fairtrade International, developed a Programmatic Approach for Climate Change Adaptation and a Methodology for its implementation. This includes a climate change sensitization session.

7. Highlight climate change adaptation to consumers and support consumer-facing actors (retailers) in relevant communication. During the KII, it was highlighted that consumers demand mitigation but lack awareness on adaptation needs. Fairtrade International is currently working on an offer for private actors regarding climate change adaptation, which could feed into such processes.

8. Building up such capacities, especially among the PNs, to apply for funds available within their regions could be beneficial. According to the KII, staff capacities within Fairtrade International, the National Fairtrade Organizations, as well as the Producer Networks, for screening funding opportunities and developing suitable proposals is limited.

9. Consider demanding more (technical support, funds, lobbying and action at own premises) from downstream value chain actors on environmental aspects, e.g. through the Trader Standard.

10. Assess and discuss options and advantages/ disadvantages of making Premium investments in environmental aspects compulsory, e.g. as an obligatory criterion in the prioritization of Premium use or as a fixed benchmark (X percent) of the Premium that has to be invested accordingly. Decisions on Premium use are taken by the SPO or workers of the HLO. To ensure their needs are covered discussions could also be structured based on Fairtrade sales, e.g. if more than 60 percent of the total production certified is sold into the Fairtrade market, at least X percent has to be invested in production or environmental aspects; if 70 percent is sold as Fairtrade, Y percent has to be invested. Another option, though not as impactful, would be to elaborate best practices for Premium investments and elaborate guidance on which Premium investments have socio-economic as well as environmental benefits.

11. Further assess options to pool climate change risks, e.g. through insurance schemes or setting up resilience funds. The Global InsuResilience Partnership might be a good partner on this matter.

12. Further explore ideas around the internalization of costs related to climate change adaptation, environmental protection and biodiversity conservation within ongoing discussions in Germany around a "Fair VAT" or the "liberation from the German Coffee Tax". Fairtrade actors are involved in these ongoing discussions and such fora can and should continuously be used for advocacy purposes.

52 See http://www.intracen.org/news/ITC-partners-with-leading-European-brands-to-strengthen-climate-resilience-in-the-Moroccan-textile-sector/ and https://www.climate-expert.org/en/home/

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ANNEX

I. Overview of the analysis carried out and data considered

Activity	Timeframe
Kick-off meeting	17 October 2018
Inception Phase: • Screening of provided inputs and data by Fairtrade International • Development of evaluation matrix • Development of selection approach for case studies • Development of data collection tools and interview guidelines (Skype/phone interviews, Focus Group Discussions, Key Informant Interviews, real-life stories) • Development of Inception Report	17 October – 21 December 2018
Desk study: • Data analysis: ○ CODImpact data 2014 – 2016 ○ List of environmentally themed interventions by Fairtrade from February 2018 (list indicated as not including all interventions as no systematic documentation of such interventions takes place within the Fairtrade system) ○ List of adaptation projects ○ List of mitigation (carbon credit generation) projects ○ Fairtrade Theory of Change and relevant indicators from June 2018 ○ SCORE data 2013 – 2017 ○ Impact Monitoring questionnaires (2018) and data (2016 and 2017) ○ Relevant studies: ■ Alig. M. (2019): "Life Cycle Assessment Cut Roses"; treeze Ltd. ■ De Groot Ruiz, A., Fobelets, V., Grosscurt, C., Galgani, P., Lord, R., Hardwicke, R., Tarin, M., Gautham, P., McNeil, D., Aird, S. (2017): "The external costs of banana production: A global study", Fairtrade International and True Price and Trucost ■ Komives, K., Arton, A., Baker, E., Kennedy, E., Longo, C., Newsom, D., Pfaff, A., Romero, C. (2018): "Toward sustainability: The roles and limitations of certification", Meridian Institute ■ Loconto, A., Silva-Castañada, L., Arnold, N., Jimenez, A. (2018): "Participatory Analysis of the Use and Impact of the Fairtrade Premium", LISIS ■ Mauthofer, T., Schneider, E., Väth, S., von Cölln, F., Silvestrini, S. (2018): "Follow up Study – Assessing the Impact of Fairtrade on Poverty Reduction through Rural Development", CEval GmbH 2018 - case study on bananas (Peru), May 2018 ■ Reppin S., Kuyah, S., de Neergaard, A., Oelofse, M., Rosenstock, T. (2019): "Contribution of agroforestry to climate change mitigation and livelihoods in Western Kenya", Springer, Netherlands ■ Smith, S. (2010): "Fairtrade Bananas: a global assessment of impact", Institute of Development Studies	15 November 2018 – 20 April 2019

Activity	Timeframe
• Interviews with internal and external stakeholders: ○ Fairtrade International, Director of Standards and Pricing ○ Fairtrade International, Standards Product Manager ○ Fairtrade International, Senior Advisor Climate Change ○ Fairtrade International, Director of Monitoring, Evaluation and Learning ○ TransFair e.V., Development Policies Manager ○ Max Havelaar France, Program Manager & Impacts ○ FLOCERT GmbH, Regional Coordinator for Certification in East Africa ○ Fairtrade Africa, MEL Coordinator ○ Fairtrade Africa, Flower Manager ○ Fairtrade Africa, Member & Partnerships Manager East Africa ○ Fairtrade Africa, Business Support Officer Coffee ○ Fairtrade Africa, Business Development Advisor Coffee ○ Fairtrade Africa, Business Support Officer Flowers ○ CLAC, Coordinador del Producto Cacao ○ CLAC, Coordinador del Producto Banano ○ CLAC, Gestor de Fortalecimiento y Desarrollo ○ NAPP, MEL Manager ○ NAPP, Program Manager ○ BLUME2000, Manager Corporate Responsibility ○ Forum Fairer Handel, Chair of Board ○ German Initiative on Sustainable Cocoa, Projects and Partnerships ○ German Initiative on Sustainable Cocoa, Executive Secretary ○ Global Nature Fund, Head of the Section Unternehmen und Biologische Vielfalt ○ Port International Bananas GmbH, Director ○ Port International Bananas GmbH, Quality Management and CSR ○ Tchibo GmbH, Manager CSR Environment and Coffee ○ Tchibo GmbH, Senior Advisor CSR	
Case studies: • Kenya: 12 – 18/05; coffee and flowers • India: 27/05 – 07/06; cotton and tea • Panama: 18 – 22/06; bananas • Costa Rica: 23 – 28/06; cocoa Each case study entails: Data analysis (specific data on the producer organization (e.g. producer profiles, CODImpact data[53], SCORE data[54]), Key Informant Interviews with the producer organizations and other stakeholders, Focus Group Discussion, individual interviews with producers for real-life story inputs, on-site visits, wrap-up workshop with the PO, data assessment, report writing	02 May – 31 August 2019
Data analysis, presentation of findings and elaboration of final report	01 September – 15 December 2019

53 Data which is potentially collected during the audit by the auditor.
54 Audit data.

II. Executive summaries of conducted case studies

A. Bananas – Panama

The case study from Panama on banana production is part of a global impact evaluation of Fairtrade producer organizations (POs). The goal of the study is to examine the impact of Fairtrade with regard to environmental protection, biodiversity conservation and adaptation to climate change. For this purpose, the following three Fairtrade interventions are assessed: Fairtrade Standards (Standard for Small-scale Producer Organizations and Hired Labour Standard), Fairtrade support (trainings, projects) for producer organizations and the use of the Fairtrade Premium.

The consultant visited the banana PO in Changuinola, Panama, from June 19th to 22nd 2019. During this mission the consultant conducted interviews with board members of the PO, organized a Focus Group Discussion (FGD) with members of the PO, and visited and engaged with relevant stakeholders. As well as Fairtrade certification, the PO has also been certified by GLOBALG.A.P. and Rainforest Alliance.

The main environmental challenges for banana production in the region are related to water availability (rainfall times and amounts, humidity levels on the plantations) and contamination (due to the use of agrochemicals and waste). Water shortages lead to dehydration of soils and banana plants, ultimately resulting in production losses and sometimes plant losses. Frequent chemical applications to control the leafspot disease Sigatoka lead to the acidification of soils and increased production costs.

At the same time, banana production generates a lot of waste such as agrochemical containers, strings to tie the banana plants together, and plastic bags to protect the fruits from pest attacks. Soil and water contamination are the consequences. To reduce such negative impacts, the PO is collaborating with a private company that is just starting to recycle plastic. However, its recycling capacities are still weak.

Despite these challenges, a positive developmental trend can be confirmed for the PO. According to the members, environmental conditions as well as quality of life have increased in part thanks to Fairtrade. The negative impacts of climate change, environmental degradation and changes in the local biodiversity are perceived to be buffered by interventions of the PO such as renovation and reforestation, the production and use of biochemicals, and precision agriculture. Of these interventions, renovation and reforestation are linked to Fairtrade as they are funded by the Fairtrade Premium. The other two interventions have no relation to Fairtrade.

The positive impacts on environmental protection, climate change adaptation and biodiversity protection were mainly found to be related to the Fairtrade Premium. The PO sells almost all its production as Fairtrade and thus receives high Premium payments. The General Assembly agreed to invest 65 percent of the Premium into social aspects (mainly payments to members), 25 percent into production (mainly renovation), and ten percent into environmental issues (such as reforestation and environmental awareness raising in the community). Therefore, environmental responsibility is taken on and backed up by the PO's own funding.

Fairtrade certification is considered the basis for collaboration, i.e. the entry point for supportive partnerships. This is coupled with Fairtrade's (CLAC's) producer support through CLAC stimulating and facilitating such partnerships. Direct impacts due to the implementation of the Standard for Small-scale Producer Organizations could not be detected due to the other two certifications the PO holds.

All in all, this case study shows that Fairtrade interventions have the potential to contribute to generating impacts regarding environmental protection, biodiversity conservation and climate change resilience. In this case, the Premium is the most important tool. The bigger the Premium earned the more likely investments in related activities are.

B. Cocoa – Costa Rica

The case study from Costa Rica on cocoa production is part of a global impact evaluation of Fairtrade producer organizations (POs). The goal of the study is to examine the impact of Fairtrade with regard to environmental protection, biodiversity conservation and adaptation to climate change. For this purpose, the following three Fairtrade interventions are assessed: Fairtrade Standards (Standard for Small-scale Producer Organizations and Hired Labour Standard), Fairtrade support (trainings, projects) for producer organizations and the use of the Fairtrade Premium.

The consultant visited the cocoa organization located in Talamanca, Costa Rica from June 23rd to 26th 2019. During this mission the consultant conducted interviews with board members of the PO, organized a Focus Group Discussion (FGD) with members of the PO, and held a wrap-up workshop with PO members and representatives of the Fairtrade Producer Network CLAC.

Throughout the analysis, it was stated that changes in rainfall patterns have negatively impacted on cocoa production in the region. Strong heavy rains in a short time coupled with longer dry spells lead to reduced water holding capacities of soils and losses of water. At the same time,

landslides increase resulting in losses of topsoil, plants and infrastructure. Furthermore, the PO noted changes in the local biodiversity, such as the appearance of insects that were previously common only at lower attitudes. These changes destabilize the local ecosystem and impact on agricultural production. Deforestation due to human needs further intensifies the increase in temperatures, again negatively impacting on agricultural production.

The PO obtained organic certification before Fairtrade certification. The mostly indigenous members believe in agroforestry production systems and hardly use any inputs in their cocoa production. Despite their conservation efforts, they are seeing a decline in local environmental conditions, mainly related to demographic growth and increasing human needs. The PO has demonstration plots at its offices, produces biochemicals and shade as well as cocoa seedlings. These activities are perceived to support the conservation/improvement of soil fertility and reduce the negative impacts of climate change and changes in biodiversity.

In this case, no specific change regarding the environment, climate change or biodiversity due to Fairtrade certification was detected. As a result of its organic certification, implementation of Fairtrade's Standard for Small-scale Producer Organizations adds little to no extra benefit in this regard. Support from Fairtrade (through CLAC) mostly centres around social and structural aspects. As a result of low production volumes and Fairtrade sales of only around 30 percent, Premiums earned are low. The Premium is used for paying organic certification which could be seen as an indirect benefit. However, the PO was able to cover its organic certification costs before it obtained Fairtrade certification; therefore, Fairtrade can hardly be considered an "enabler" for organic certification in this case – probably moreso a "maintainer".

All in all, this case study shows hardly any impact by Fairtrade on environmental protection, climate change adaptation and biodiversity conservation. Due to cocoa production using agroforestry systems, high environmental awareness, and responsibility assumed by the PO coupled with organic certification, Fairtrade is adding little additional impact on these aspects.

C. Coffee – Kenya

The case study from Kenya on coffee production is part of a global impact evaluation of Fairtrade producer organizations (POs). The goal of the study is to examine the impact of Fairtrade with regard to environmental protection, biodiversity conservation and adaptation to climate change. For this purpose, the following three Fairtrade interventions are assessed: Fairtrade Standards (Standard for Small-scale Producer Organizations and Hired Labour Standard), Fairtrade support (trainings, projects) for producer organizations and the use of the Fairtrade Premium.

The consultant visited the coffee PO located in Kirinyaga County, Kenya from May 13th to 15th 2019. During this mission the consultant carried out Key Informant Interviews, conducted interviews with board members of the PO and organized a Focus Group Discussion (FGD) with members of the PO.

The main environmental challenges for coffee production in Kirinyaga are related to rainfall and water availability. Prolonged rainy seasons cause erosion and result in the loss of valuable topsoil and, at the same time, lead to a rise in incidences of Coffee Berry Disease increasing the need for chemical application and thus the cost of production. Prolonged dry spells again cause erosion resulting in the loss of valuable topsoil and a rise in pest and disease incidences increasing the need for chemical application and thus the cost of production. Furthermore, prolonged dry spells lead to a lack of drinking water. In addition, deforestation for charcoal use reinforces the negative impacts of erosion and further reduces the availability of water in the region.

Wastewater from coffee is a general challenge. Washing stations hardly manage wastewater treatment properly, thus contamination cannot be adequately prevented. A lack of conservation practices around water bodies especially may lead to contamination and increase the risk of erosion.

Despite these challenges, a positive developmental trend can be confirmed for the PO. Access to inputs, soil fertility and farming knowledge are perceived to have strongly increased since 2010, resulting in a reduction in environmental degradation and better protection of biodiversity. The most important environmental intervention by the PO is the reduced and more appropriate use of agrochemicals. This plays a key role and impacts on most of the indicators of the Fairtrade Small-scale Producer Standard (SPO). A positive impact by Fairtrade was detected regarding environmental degradation, coffee yields and soil fertility. Farmers perceive the introduction of buffer zones due to Standard requirements as very beneficial for both water bodies and water quality.

The impacts of Fairtrade's producer support on environmental aspects could not be detected in this case. Impacts of Premium use regarding environmental protection, biodiversity conservation and adaptation to climate change are minimal due to very low Fairtrade sales (four percent). Parts of the Premium have recently been invested in metallic drying beds and the provision of goat manure to members. Both activities are likely to show environmental impacts but it is too early to say yet.

As well as the three Fairtrade interventions, organizational development due to Standard implementation was found to have fostered environmental benefits by, for example, attracting new partners for environmental projects (energy saving stoves) or by relevant trainings offered by the organization to its members.

D. Flowers – Kenya

The case study from Kenya on flower (rose) production is part of a global impact evaluation with Fairtrade producer organizations (POs). The goal of the study is to examine the impact of Fairtrade with regard to environmental protection, biodiversity conservation and adaptation to climate change. For this purpose, the following three Fairtrade interventions are assessed: Fairtrade Standards (Standard for Small-scale Producer Organizations and Hired Labour Standard), Fairtrade support (trainings, projects) for producer organizations and the use of the Fairtrade Premium.

The consultant visited the hired labour organization located in Njoro, west of Nakuru town, in Kenya from May 15th to 18th 2019. During this mission the consultant carried out Key Informant Interviews, conducted interviews with board members of the HLO and organized a Focus Group Discussion (FGD) with workers of the HLO.

The main environmental challenges are related to water availability and rainfall. Prolonged dry spells lead to water shortages resulting in changes to the production cycle. This, in turn, translates into production not meeting market requirements, i.e. when the demand is there, supply is lacking or vice versa. During parts of the year potable as well as non-potable water for production purposes is scarce. Boreholes, dams and water tanks have been installed though and these reduce the negative impacts of water scarcity. Furthermore, strong winds damage the greenhouses and lead to production losses. Overall though, HLO management and workers perceive their farm as well as their communities to be in good environmental condition.

Chemical use and related contamination of water bodies and soils present a risk. However, relevant practices according to Fairtrade's Hired Labour Standard and other flower standards[55] are in place to minimize negative effects.

Generally, a positive developmental trend can be confirmed for the HLO. Water availability is perceived to have strongly increased since 2007 (based on the provision of water tanks to workers and drilling of new boreholes on the farm) and the impacts of climate change, pests and diseases, environmental degradation and changes in biodiversity are perceived as being less since then. The most important intervention for the organization is chemical management according to the HL Standard. However, attribution of any impacts because of enhanced chemical management is not possible due to the other certifications held by the company. Tree planting on and off the farm and financed by the Fairtrade Premium is the second most important intervention contributing to environmental protection.

The impacts of Fairtrade's producer support on environmental aspects could not be detected in this case. The impacts of Premium use regarding environmental protection, biodiversity conservation and adaptation to climate change are minimal due to low Fairtrade sales (under ten percent). Parts of the Premium have been invested in setting up a nursery for shade (native and exotic) and banana trees, providing these tree seedlings to the workers, and providing workers with gas cookstoves and water tanks in their homes. These activities are believed to support environmental protection, biodiversity conservation and adaptation to climate change.

All in all, this case study shows that Fairtrade interventions have the potential to contribute to generating impacts regarding environmental protection, biodiversity conservation and climate change resilience. However, in the case of this HLO this impact is: a) not solely attributable to Fairtrade, and b) strongly dependent on the choices of the Fairtrade Premium Committee. Investing the Premium in social aspects is prioritized to a large extent over environmental investments and, due to the low Premium payments earned, funds invested in environmental themes are marginal.

E. Cotton and Tea – India

The two case studies on tea and cotton production in India are part of a global impact evaluation of the Fairtrade producer organizations (POs) to examine their environmental impact.

The consultant visited one PO and one HLO from May 27th to June 7th 2019. During this mission he carried out Key Informant Interviews, conducted interviews with farmers in the cotton PO and workers in the tea HLO and organized Focus Group Discussions (FGD) with workers and farmers.

Tea production in Assam increasingly suffers from irregular and torrential rainfall events as well as temperature increases due to climate change. Additionally, illegal deforestation and the resulting reduction in biodiversity is a major challenge in the area outside the tea estate.

Despite these trends, the environmental conditions in the Phulbari tea garden, as well as in the communities involved, are perceived as having been stable over the past ten years thanks to good environmental management. Environmental interventions (e.g. the reduction of agrochemicals, reforestation and energy saving techniques) as well as environmental awareness improved during the last decade. These changes, however, cannot be attributed to the Fairtrade Standard but to research, other available alternatives (e.g. insecticide traps), economic considerations and national laws which have become

55 MPS SQ and ABC (Milieu Programma Sierteelt or 'Environmental Programme Floriculture' in English) and KFC Silver (Kenya Flower Council)

stricter in India over the years. There are various factors which limit the potential environmental impact of the Fairtrade Hired Labour Standard, *inter alia*, that the environmental aspects are perceived as being too generic and lack baselines, target values and a binding character. Also, use of the Premium in environmental related aspects is minimal (mainly energy saving stoves and lighting, and drainage systems) and limited to environmental co-benefits. Thus, no major environmental impacts could be registered in this case study.

Cotton production in Madhya Pradesh suffers from the late onset of the rains, water scarcity, loss of soil fertility and very high temperatures. Various interventions (e.g. irrigation schemes) have been implemented by the PO since the farmers visited became members of the Fairtrade system in 2013. These measures have improved and stabilized the environmental conditions although weather related impacts, environmental degradation and loss of biodiversity persist and still pose major challenges in the communities.

Environmental resilience regarding pests and plant diseases in particular has improved significantly. Organic farming, control of soil erosion and the increase and maintenance of vegetation cover are vital for improving environmental resilience. Rainwater harvesting, improved well systems and organic farming are among the most important environmental interventions for the livelihoods of farmers. They substitute expensive external inputs and contribute to improved production factors, mainly the availability of inputs, soil fertility and knowledge. Additionally, the environmental awareness of the Fairtrade farmers has increased. The Fairtrade Standards and relevant trainings on environmental topics are recognized as the main reasons for these positive impacts. The Premium projects, however, attract more attention from the farmers as they benefit directly from them. These are mostly infrastructure interventions (e.g. water tanks, well recharge systems or biogas plants) or the distribution of goods or materials (fruit trees, crop covers, etc.). The positive development trends on environmental issues cannot only be attributed to Fairtrade but also to the government of India which, mainly through the Department of Agriculture, provides subsidies for several environmental related improvements, biogas plants and water harvesting facilities.

III. Environmental challenges per case study

Cocoa	Bananas	Coffee	Flowers	Cotton	Tea
• Pressure on natural resources (e.g. due to contamination, soil exploitation, deforestation) • Landslides •Increasing temperatures • Changes in biodiversity → Loss of soil, plants and infrastructure → Production losses	• Water, soil and air contamination • Deforestation • Erosion • Less rain • Strong winds • Pest and disease attacks • Natural extreme events	• Prolonged rainy season • Prolonged dry spells • Deforestation → Erosion →Increase in pest and disease attacks →Water shortages → Increase in production costs	• Prolonged dry spells • Strong winds • Shortage of rains → Water stress, lack of water (potable and non-potable) →Damage to production infrastructure → Production losses	• Late onset of rains • High temperatures • Deforestation • Soil and water contamination → Water scarcity	• Irregular and torrential rainfall • Wetter and colder days in May and June • Increasing temperatures • Deforestation and loss of biodiversity (in surrounding areas) → Stagnant water / waterlogging

IV. SPO and HL performance in compliance with environmental criteria

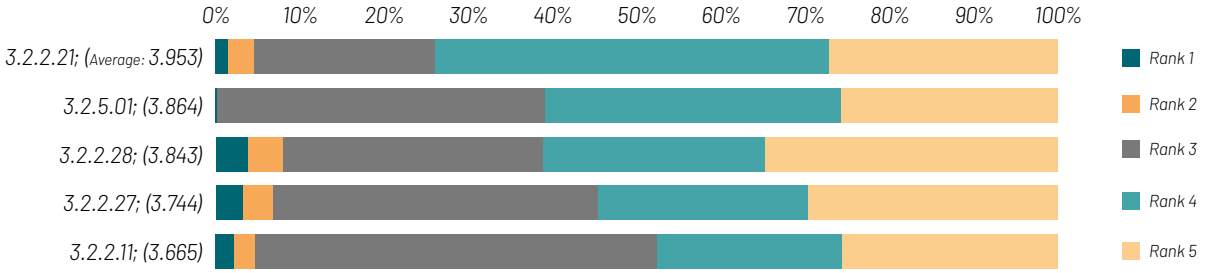
Standard for Small-scale Producer Organizations

In total, 60,407 single answers from 1,702 SPO audits have been assessed. Overall, the average performance for all environmental criteria of SPOs is 3.27. The usual modal value and median is 3. Good performance is observable for the category on Genetically Modified Organisms as well as for the Proper Use and Handling of Pesticides, with notable exceptions. Of note for this category is that, although for most compliance criteria almost a fifth reach the highest rank, the same proportion is only ranked 1 or 2. The main challenges are related to Storage Facilities (3.2.2.12), Equipment (3.2.2.07) and Proper Trainings for pesticide use. The soil and water categories achieve an average ranking where most compliance criteria display a relatively high percentage of Rank 5 but at the same time a high proportion of Rank 2. Low performance is achieved regarding the Choice of Pesticides (3.2.2.d), but there are often only few answers available. The performance for criteria on Greenhouse Gases (GHG) and Energy is also rather low as it is on Training or Informing Members (e.g. 3.2.6.06; 3.2.6.07; 3.2.3.07).

The compliance criteria with best results, i.e. the highest percentage of Rank 5 and the lowest percentage of Rank 1 are:

- 3.2.2.11: If you, the members of your organization or subcontractors spray pesticides or other hazardous chemicals from the air, you and your members or the subcontractors do not spray above and around places with ongoing human activity or with water sources.[56]
- 3.2.2.21: You and the members of your organization do not use the materials on the Fairtrade International Prohibited Materials List (PML) Part 1 (Red List) on the Fairtrade crop.
- 3.2.2.27: You have developed a procedure to ensure that members do not use on the Fairtrade crops any material that appears on the Fairtrade International Prohibited Materials List Part 1 (Red List). The procedure includes activities that raise your members' awareness of the PML.
- 3.2.2.28: You work towards all members who use herbicides minimizing the amount they use by implementing other weed prevention and control strategies.
- 3.2.5.01: You and your members do not intentionally use genetically engineered seed or planting stock for Fairtrade crop(s).

SPOs: Proportion of Ranks of Top 5 Compliance Criteria



3.2.2.21: You and the members of your organization do not use the materials on the Fairtrade International Prohibited Materials List (PML) Part 1 (Red List) on the Fairtrade crop.
3.2.5.01: You and your members do not intentionally use genetically engineered seed or planting stock for Fairtrade crop(s).
3.2.2.28: You work towards all members who use herbicides minimizing the amount they use by implementing other weed prevention and control strategies.
3.2.2.27: You have developed a procedure to ensure that members do not use on the Fairtrade crops any material that appears on the Fairtrade International Prohibited Materials List Part 1 (Red List). The procedure includes activities that raise your members' awareness of the PML.
3.2.2.11: If you, the members of your organization or subcontractors spray pesticides or other hazardous chemicals from the air, you and your members or the subcontractors do not spray above and around places with ongoing human ctivity or with water sources.

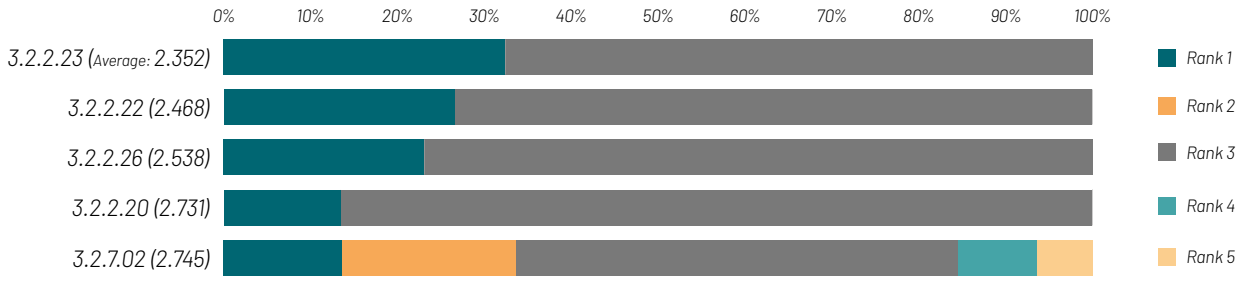
The compliance criteria with lowest results, i.e. highest proportion of Rank 1 and lowest proportion of Rank 5, are:

- 3.2.2.20: You have identified land at risk of soil erosion and already eroded land in the fields where your members plant Fairtrade crops.
- 3.2.2.22: Prohibited materials (if used/stored) are clearly marked not for use on Fairtrade crops.
- 3.2.2.23: By derogation, you and your members have applied for certain materials from the Fairtrade International PML Part 1 (Red List). You use materials only if you have previously requested the use to the certification body and received permission. (Please note: low results on this compliance criterion are a positive indication.)

56 *This criterion was indicated as not useful during the KII; human activity and water sources are considered present throughout plantations and thus air spraying should be prohibited.*

- 3.2.2.26: Evidence of need has been demonstrated by the producer.
- 3.2.7.02: You have documented practices that you or the members of your organization carry out to reduce Greenhouse Gas (GHG) emissions and increase carbon sequestration.

SPOs: Proportion of Ranks of Lowest 5 Compliance Criteria



3.2.2.23: By derogation, you and your members have applied for certain materials from the Fairtrade International PML Part 1 (Red List). You use materials only if you have previously requested the use to the certification body and received permission.
3.2.5.22: Prohibited materials (if used/stored) are clearly marked not for use on Fairtrade crops.
3.2.2.26: Evidence of need has been demonstrated by the producer.
3.2.2.20: You have identified land at risk of soil erosion and already eroded land in the fields where your members plant Fairtrade crops.
3.2.7.02: You have documented practices that you or the members of your organization carry out to reduce Greenhouse Gas (GHG) emissions and increase carbon sequestration.

Regarding regional differences, the rankings of all three regions (Africa and Middle East, Latin America and Carribean, Asia and Pacific) are mostly similar with the exception of three categories with notable differences:

- Among the category Choice of Pesticides Used (3.2.2.d), Africa underperforms in comparison to both other regions from subcategory 3.2.2.23 onwards. African SPOs are much more frequently awarded with Rank 1 and Rank 5 than the other two regions.
- Africa is performing better in the categories of Energy and parts of Biodiversity (3.2.6 and 3.2.7). Here, Africa has more high performers (Rank 5) than the other regions, and at the same time, a high proportion of under performers (Rank 1). Asia and Latin America are centred more around Rank 3 in these categories.
- Africa shows more low performers (in comparison to Asia and Latin America) for the category 3.2.3a – e on Soil and Water and, at the same time, more high performers.

Hired Labour Standard

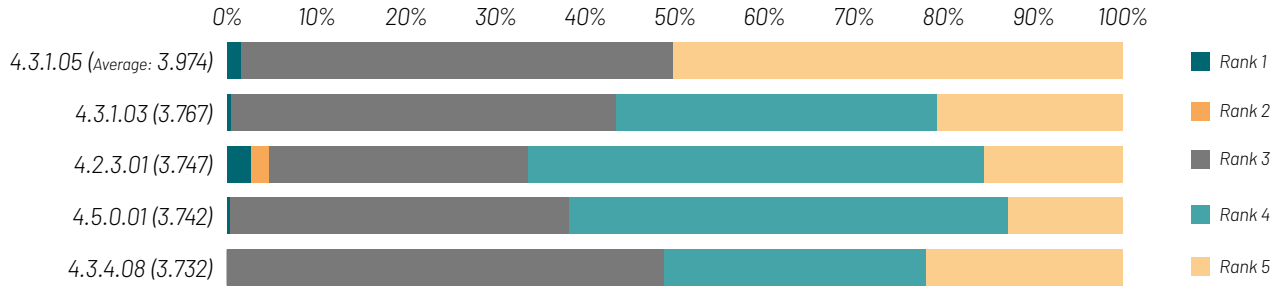
In total, 35,743 answers from 346 HL audits have been assessed. The overall average performance is 3.19. The usual modal value and median is 3. The best results are on Access to Pest Management Strategies and Management of Pesticides (4.1. and 4.2.1.01 and 02), Management of Fertilizers (4.3.1) and handling of Conservation Areas (4.6.0.01-05). Rather low results are on Energy/GHG Emissions (4.7.0.), Environmental Management (4.1.) and Hazardous Chemicals (4.2.2.).

There are hardly any single categories showing good or bad average results. Rather, single compliance criteria show high or low ranks. Most compliance criteria display around 60 percent and 100 percent for Rank 3. The HL results are thus more uniform than the SPO results.

The compliance criteria with best results are:

- 4.3.1.03: The company applies fertilizers (inorganic and organic) in amounts that respond to the nutrient need of the crop.
- 4.3.1.05: The company stores fertilizers (inorganic and organic) separately from pesticides, unless the labels allow for mixed storage.
- 4.5.0.01: The company does not intentionally use genetically engineered seed or planting stock for the Fairtrade crop(s).
- 4.3.4.08: The company makes use of the best available technology for irrigation in order to optimize the quantities of water applied.

HLOs: Proportion of Ranks of Top 5 Compliance Criteria

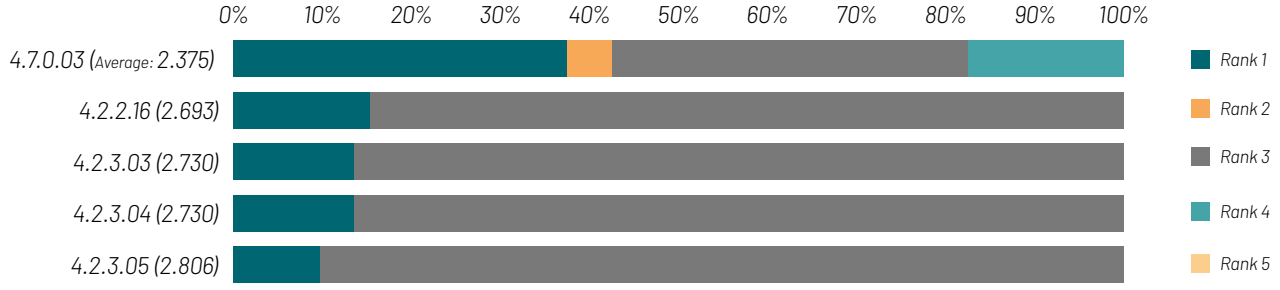


4.3.1.05: The company stores fertilizers (inorganic and organic) separately from pesticides, unless the labels allow for mixed storage.
4.3.1.03: The company applies fertilizers (inorganic and organic) in amounts that respond to the nutrient need of the crop.
4.2.3.01: Materials on the Fairtrade International Prohibited Materials List (PML) Part 1 (Red List) are not used by the company on the Fairtrade crop(s).
4.5.0.01: The company does not intentionally use genetically engineered seed or planting stock for the Fairtrade crop(s).
4.3.4.08: The company makes use of the best available technology for irrigation in order to optimize the quantities of water applied.

The compliance criteria with lowest results are:

- 4.2.2.16: Once triple rinsed, empty containers are punctured and stored while awaiting disposal.
- 4.2.3.03: Pesticides prohibited in the Prohibited Material List Part 1 (Red List) are clearly marked "Not for use on Fairtrade crops".
- 4.6.0.09: The company participates actively in local or regional environmental projects or has a biodiversity plan.

HLOs: Proportion of Ranks Lowest 5 Compliance Criteria



4.7.0.03: There is a study on the Greenhouse Gas (GHG) emissions and measures have been implemented to reduce GHG emissions and increase carbon sequestration.
4.2.2.16: Once triple rinsed, empty containers are punctured and stored while awaiting disposal.
4.2.3.03: Pesticides prohibited in the Prohibited Materials List (PML) Part 1 (Red List) are clearly marked "Not for use on Fairtrade crops".
4.2.3.04: Supporting documents (expert opinion for evidence of need, records of use, how use is minimized in a phase-out plan and appropriate H&S measures) are available onsite.
4.2.3.05: The approved phase out plan is implemented and measures are followed up (the phase-out plan can be integrated into the Company's Plan) in order to minimize and finally substitute the prohibited material.

Besides those challenges for Hired Labour Organizations (HLOs), there are compliance criteria which are not universally applicable, but present major challenges to the POs that have to adhere to them:

- 4.2.0.24: (Quinoa) At least 30 percent of the Fairtrade Premium of the last financial year must be dedicated to investment into environmentally sustainable measures for the production and the processing of quinoa. Investment can be made at the level of individual members and/or the producer organization. The General Assembly decides on the activities to be carried out. The producer organization needs to keep records on the use of the monies and needs to be able to explain in which way the Premium use contributes to the improvement of environmental sustainability.

- 4.2.3.04: (Only applicable in the case of an approved use of material on the Fairtrade International Red List by FLOCERT under exceptional conditions) Supporting documents (expert opinion for evidence of need, records of use, how use is minimized in a phase-out plan and appropriate Health & Safety measures) are available onsite.

- 4.2.3.05: (Only applicable in the case of an approved use of material on the Fairtrade International Red List by FLOCERT under exceptional conditions) The approved phase-out plan is implemented and measures are followed up (the phase-out plan can be integrated into the Company's Plan) in order to minimize and finally substitute the prohibited material.

- 4.7.0.03: (as of 1 July 2017) There is a study on the Greenhouse Gas emissions and measures have been implemented to reduce GHG emissions and increase carbon sequestration.

Similar to the SPO results, regional differences regarding environmental performance among HLOs are minor with the following exceptions:

- Handling of Pesticides (4.2.2.01-05) has more high performers in Africa and Latin America compared to Asia; Africa and Asia have similar proportions of low performers in this regard. Asia's average performance is the lowest of all three regions.

- Storing and Applying Pesticides is ranked lowest in Asia (centred around 3); Africa and Latin America have higher proportions of high performers.

- Biodiversity and Conservation (4.5.0.02-4.6.0.04) has proportionally most high performers in Africa while low performers are similar for all three regions; Asia is performing rather low in regard to buffer zones.

- The Use and Storage of Fertilizers (4.3.1.01-05) has proportionally most high performers in Africa, and almost no low performers anywhere.

IV. Premium investments in environmental aspects per region

Africa and Middle East	Amount (€)
Provision of fertilizers to farmer members	623,333
Renewal/replanting of plantations	333,079
Clean water and sanitation facilities	295,667
Farmer training - productivity improvement	141,187
Tree planting/reforestation	119,783
Investment in energy infrastructure	56,978
Other community environmental programmes	49,391
Farmer training - product quality improvement	33,268
Land rehabilitation and reclaiming programmes	8,741
Farmer training - pest management	4,040
Recycling and waste management	3,033
Soil protection programmes	2,240
Intercropping and cover crops	1,971
Composting programmes	1,227
Farmer training - soil management	1,203
Crop spraying programmes	286
Waste management programmes	53
Clean water and sanitation facilities for workers and their families	0
Crop diversification programmes	0
Irrigation demonstration and promotion	0
Irrigation installation	0
Pond and watercourse maintenance	0
Soil analysis	0
Water analysis	0
Farmer training - water management	0
Total Premium invested (2013/14 – 2015/16)	**1,675,480**
Total Premium earned (2013/14 – 2015/16)	**81,785,615**

Asia and Pacific	Amount (€)
Provision of fertilizers to farmer members	1,438,918
Renewal/replanting of plantations	541,132
Clean water and sanitation facilities	357,693
Farmer training - product quality improvement	147,852
Land rehabilitation and reclaiming programmes	113,011
Tree planting/reforestation	51,845
Other community environmental programmes	32,811
Composting programmes	30,333
Investment in energy infrastructure	29,966
Intercropping and cover crops	24,834
Farmer training - productivity improvement	18,671
Pond and watercourse maintenance	14,688
Irrigation installation	9,754
Recycling and waste management	8,266
Farmer training - pest management	7,888
Soil protection programmes	7,435
Waste management programmes	6,772
Crop diversification programmes	5,203
Farmer training - water management	3,194
Farmer training - soil management	1,744
Clean water and sanitation facilities for workers and their families	1,358
Soil analysis	213
Crop spraying programmes	0
Irrigation demonstration and promotion	0
Water analysis	0
Total Premium invested (2013/14 – 2015/16)	**2,853,582**
Total Premium earned (2013/14 – 2015/16)	**36,632,268**

Latin America	Amount (€)
Provision of fertilizers to farmer members	3,893,798
Renewal/replanting of plantations	3,634,619
Farmer training - productivity improvement	2,364,126
Farmer training - product quality improvement	1,805,067
Crop spraying programmes	715,662
Soil protection programmes	504,782
Other community environmental programmes	416,078
Farmer training - pest management	411,832
Investment in energy infrastructure	318,323
Tree planting/reforestation	138,082
Crop diversification programmes	136,542
Land rehabilitation and reclaiming programmes	126,990
Composting programmes	110,525
Clean water and sanitation facilities	105,972
Intercropping and cover crops	73,673
Soil analysis	68,568
Irrigation installation	47,083
Recycling and waste management	26,897
Pond and watercourse maintenance	14,715
Farmer training - soil management	11,038
Farmer training - water management	9,603
Waste management programmes	9,005
Irrigation demonstration and promotion	8,546
Water analysis	628
Clean water and sanitation facilities for workers and their families	503
Total Premium invested (2013/14 – 2015/16)	**14,952,656**
Total Premium earned (2013/14 – 2015/16)	**244,128,131**

V. Inception Report

FAKT Consult for Management, Training and Technologies

Inception Report

Analysis of the producer level impact of Fairtrade on environmentally friendly production, biodiversity conservation and resilience & adaptation to climate change

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CONTENTS

LIST OF ABBREVIATIONS

CLAC	Producer Network Latin America
DAC	Development Assistance Committee
DeGEval	Deutsche Gesellschaft für Evaluation
FTA	Fairtrade Africa
FGD	Focus Group Discussion
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ISEAL	International Social and Environmental Accreditation and Labelling Alliance
IR	Inception Report
KII	Key Informant Interviews
HL	Hired Labour
MAPP	Method for Impact Assessment of Programmes and Projects
MEL	Monitoring, Evaluation and Learning
NAPP	Network of Asia and Pacific Producers
NGO	Non-governmental organization
OECD	Organisation for Economic Co-operation and Development
PN	Producer Network
SPO	Small Producer Organization
ToC	Theory of Change

1. CONTEXT AND BACKGROUND OF THE ASSIGNMENT AND OF THE INCEPTION REPORT

In the beginning, Fairtrade Standards or producer support did not take into account the environmental impact of Fairtrade certified agricultural production. Over time both Fairtrade Standards and programmes have included more and more environmental aspects. As of today, environmental criteria make up an important share of the criteria of the Fairtrade Hired Labour (HL) Standard and the criteria of the Fairtrade Standard for Small-scale Producer Organizations (SPO). These include issues such as pest management, pesticide use, soil management, water use, biodiversity and more. Fairtrade programmes support producers around these issues as well as in building their resilience and adaptation strategies for climate change.

There is a growing interest in Fairtrade's impact on environmental friendly agricultural production as well as how certification schemes impact and support climate change adaptation and biodiversity protection. Yet no study has systematically and exclusively assessed the environmental impact of Fairtrade.

Fairtrade has three main types of interventions:

1. A set of Standards and tools include many environmental criteria which make up the 'rules' for (mostly) agricultural production, biodiversity protection, fair trading practices, as well as organizational development as key to functional smallholder organizations.
2. Fairtrade engagement on the ground – e.g. producer programmes, capacity building and projects (increasingly funded by third parties such as GIZ, NGOs, or other supply chain actors, e.g. retail companies) – strengthens application of better natural resources' management, environmental friendly agricultural practices, adaptation to climate change, and so on.
3. In addition to the Fairtrade Standards and Minimum Prices (set for most Fairtrade products), farmer and worker organizations receive an additional sum of money called the Fairtrade Premium. The Fairtrade Premium is important for Fairtrade impact on the environment because if "environmental projects" are implemented by Fairtrade organizations, they are usually financed through the Fairtrade premium.

All three types of interventions are to be assessed individually and in aggregate to find out their contribution to impacts around environmental aspects.

This Inception Report serves as agreed upon (methodological) roadmap for carrying out the assignment. It thus describes the methodology, the process and the responsibilities of the consultants as well as of Fairtrade International.

2. OBJECTIVES OF THE STUDY, EVALUATION QUESTIONS AND SPECIFIC PRODUCTS

The objective of the study is to assess **if and how agricultural production under Fairtrade conditions supports environmentally friendly production, biodiversity protection, and resilience and adaptation to climate change, as well as how these outcomes lead to benefits for Fairtrade farmers, workers, and their communities.**

It should:

- **analyse the data available** in the Fairtrade system on the application and impact of environmental criteria, the impact of environmentally themed Fairtrade producer programmes and capacity building, and the impact of environmentally themed investments of the Fairtrade Premium.
- select five to six **"case studies"** from the Fairtrade producers and examine their environmental impact using a mixed method approach.

Results of the study are to be used for **internal learning** as well as **for external communication.**

The following evaluation questions are to be answered:

How do Fairtrade

1. Standards and tools 2. Programmes and capacity building 3. Premium	} impact on {	the environment? biodiversity? climate change adaptation/resilience?

The Fairtrade Theory of Change provides a framework for the analysis.

Underlying questions are:

- What are perceived environmental challenges (hot spots) from the Producer Organization's perspective?
- How do Fairtrade interventions (individually and in aggregate) address environmental issues across products and geographies? Strengths? Weaknesses?
- Are there non-intended economic or social impacts from environmental approaches?
- Which gender is more important to target environmental interventions (gender perspective)?

The following products will tackle the issues and results in detail:

1. 5 – 6 case studies: 1 – 2 case studies per producer region (Latin America, Africa, Asia).
2. Inputs for 1 – 2 real-life stories for each case study.
3. Final report.
4. PowerPoint presentation on findings and conclusions.

3. EVALUATION APPROACH

FAKT follows an evaluation approach which combines ethical principles and guidelines, evaluation quality standards and a sound methodological approach in an interdisciplinary team (see also Figure 1 taken from DFID 2015[1]).

3.1 Research ethics and protocol

Participatory processes for sustainable results are the basis for FAKT evaluations and studies. Together with our clients and their partner organizations we design and accompany processes appropriate to their situation and needs. In our consultancy work we combine specific knowledge, methodological expertise, and intercultural experience. Our work is process-oriented and aims to facilitate the planning, implementation and monitoring of strategies and programmes by partner organizations, and to steer them towards tangible results. We assist them in capacity development to open up new perspectives and sustainable solutions in a world facing challenges which can only be addressed globally.

In addition, the team will follow Fairtrade International's Protection Policy for children and vulnerable adults as well as the regulations of the European Union General Data Protection Regulation (GDPR).

The evaluators will therefore at all times:

- ensure the quality and integrity of their research;
- seek informed consent, specifically with the Producer Organizations and their members during the country visits;
- respect the confidentiality and anonymity of research respondents;
- ensure that participation in the study is voluntary;
- avoid harm to study participants; and
- show that the research is independent and impartial.

Figure 1: Evaluation approach(DFID)

3.2 Quality standards

The evaluation follows international standards:

- OECD/DAC Evaluation Quality Standards;
- DeGEval[2] Standards, the standards on usefulness, viability, fairness and accuracy set by the German Evaluation Association, which strongly build on the Joint Committee Standards.

Verification, Substantiation and Triangulation are basic principles of the impact assessment. Cross-checking any findings from different angles is indispensable:

- from the perspective of different stakeholders;
- from different data sources;

1 *DFID: Review of Ethics Principles and Guidance in Evaluation and Research, January 2015, https://www.oecd.org/dac/evaluation/DFID-Ethics-Principles-Report.pdf*

2 *Deutsche Gesellschaft für Evaluation (German Evaluation Society)*

- with different approaches and tools;
- by different consultants (Kerstin Linne (KL) and Mario Donga (MD) potentially cross-checking with Christine Lottje and / or Lukas Bauermeister.

Qualitative data helps to gain a broader understanding of change; quantitative data is relevant to sustain the representativeness of information regarding changes. The impact assessment is built upon a theory-based concept (evaluation matrix) that analyses the different interventions, the expected results and the context.

3.3 Proposed methodology

Due to the nature of the study, the analysis will be summative (assessing and summing up achievements so far) and formative (process and future oriented). In order to reach both objectives, a mix of different methodological approaches for the analysis of Fairtrade's ecological impact of environmentally friendly production, biodiversity protection and resilience to climate change will be taken.

3.3.1 Inception Phase

Purpose:

- To have a common understanding of the assignment;
- To define the methodology of the assignment;
- To have an agreed upon methodology and schedule between the consultants and Fairtrade International (including other involved Fairtrade parties).

On October 17 a kick-off meeting took place between Jesse Hastings (Fairtrade International), Kerstin Linne and Mario Donga (both consultants working on this assignment for FAKT). During the meeting evaluation objectives, the final evaluation approach and a schedule for the whole evaluation process were agreed upon. Furthermore, available data was screened and data gaps identified. Outcomes and agreements of this meeting can be found in the Annex.

An initial document and data review took place in the inception phase including the following sources:

- Fairtrade Standards and related compliance criteria - Small-scale Producer Organisations and Hired Labour: This data serves to gain an understanding of the content and the level of environmental requirements to be fulfilled for certification.
- Theory of Change: To use as a framework for the evaluation as well as to check its consistency according to the findings (see Annex).
- Impact Monitoring Data (MEL): To gain an overview of existing impact information and allow for correlation of themes (e.g. gender and environment); to learn about the applied criteria for selection of the carried-out case studies under the MEL programme.
- CODImpact data (additional voluntary questionnaire to audit): To understand the Premium use of POs in general and specifically for the selected case studies; to use information on production area and volumes sold (under Fairtrade and non-certified) for case study selection.
- SCORE data (audit results): To gain an understanding of performance of POs on environmental criteria via the identification of trends based on averages across time and across countries/regions; to apply the defined methodology for choosing case studies and identify suitable POs; to have detailed information about the selected POs if applicable. *Note: Not all POs are audited every year and in an audit not all compliance criteria are audited, thus (recent) data sets for the case studies might not be available / incomplete.*

List of environmental projects: *To gain an overview of current environmentally themed projects.*

Research reports provided / pointed out by Fairtrade: *To build on existing impact studies:*

- CEval 2012: Assessing the Impact of Fairtrade on Poverty Reduction through Rural Development
- CEval 2018: 5 years later - Assessing the Impact of Fairtrade on Poverty Reduction through Rural Development
- True Price + Trucost 2017: The external costs of banana production – a global study
- Gordon & Betty Moore Foundation + Meridian Institute 2018: Conservation Impacts of Voluntary Sustainability Standards (and related ISEAL Alliance PowerPoint)
- ISEAL Alliance 2018: A State of Knowledge Review
- ODI 2017: The Impact of Fairtrade
- BASIC 2018: Café: la 'success story' qui cache la crise. Commerce Equitable France, Collectif 'Repenser les filières', Max Havelaar France

- LISIS 2018: Using the Fairtrade Premium: Improving producer organizations and livelihoods

In addition to the inputs delivered by Fairtrade the consultants have screened the following sources of information, which will at least be considered during the desk study:

- Publications by TRANS SUSTAIN available at www.uni-muenster.de/Transsustain/publications/index.htm, such as Policy Brief: Voluntary Coffee Standards Index – 2018 or research published in the International Food and Agribusiness Management Review – 2016

- Publications available through the Sustainability Impacts Learning Platform by WWF, ISEAL Alliance and Sustainable Food Lab, such as Monitoring the Scope and Benefits of Fairtrade – 6th Edition; 2014 & 5th Edition 2012 (http://fairtrade.ca/~/media/Fairtrade%20Canada/Files/What%20is/Monitoring%20the%20Scope%20and%20Benefits%20of%20Fairtrade%202014.pdf) and also 9th edition available at https://monitoringreport2017.fairtrade.net/en/, Evaluation of the Early Impact of UTZ Certified and Fairtrade Certification of Organized, Smallholders Coffee Farmers in Kenya (contact author through https://sustainabilityimpactslearningplatform.org/explore/listing/evaluation-of-the-early-impact-of-utz-certified-and-fairtrade-certification-of-organized-smallholder-coffee-farmers-in-kenya)

- WWF/ISEAL white paper: The Systemic Impacts of Voluntary Sustainability Standards (2018) at https://www.standardsimpacts.org/resources-reports/wwfiseal-white-paper-systemic-impacts-voluntary-sustainability-standards-2018 and potentially other papers and webinars available through https://www.isealalliance.org/get-involved/resources/research-webinars

This initial screening and document review further informed the choice of the methodology for the desk study, and data analysis, the selection of relevant interview partners, addressees of the online survey and case studies (see outlined within this Inception Report).

Towards the end of the inception phase, on November 29, Kerstin Linne, Mario Donga and the FAKT team (Christine Lottje and Lukas Bauermeister) met to further discuss and finalize the inception report. Results and outcomes of this meeting fed into this report.

3.3.2 Desk study

Purpose:

- To (further) assess and understand relevant contents.

- To analyse existing data regarding the specific research questions.

- To prepare for the case studies.

In a second step, provided inputs as well as other studies (see Chapter 3.3.1) will be reviewed in detail. The impact of sustainability standards is currently broadly discussed in several sectors (e.g. coffee) as well as among the standards themselves. Where possible these discussions will be considered.

Furthermore, the MEL data, CODImpact data and SCORE data will be analysed regarding the following questions:

SCORE data:

Note: The consultants are aware that not all POs necessarily have scores on every single compliance criterion. Thus, averages across countries and products will rather be used to answer the following questions:

- What is the average performance of the POs regarding environmental compliance criteria?

- What are the main challenges, i.e. which relevant compliance criteria are not / hardly met?

- Are there differences regarding the above-mentioned questions in view of region / product / type of PO (SPO/HLO)?

CODImpact data:

Note: The results of the LISIS study from 2018 on "Using the Fairtrade Premium" will be built upon for this exercise.

- What is the percentage of Premium invested in environmental aspects?

- What is the main investment focus regarding environmental aspects?

- Are there differences regarding the above-mentioned questions in view of region / product / type of PO (SPO/HLO)?

MEL data:

- To what extend is there a correlation between environmental aspects and gender aspects?

- Are there any other obvious correlations between environmental aspects and other topics?

List of environmental projects:

- What are the prioritized topics?

- What are innovative approaches regarding environment, biodiversity, climate change?

- Can regional, product or type of PO (SPO/HLO) specific conclusions be drawn?

- Is there a particular project that should be further analysed?

3.3.3 Interviews

Purpose:

- To collect the perception around impacts of Fairtrade on the environment, climate change adaptation / resilience and biodiversity conservation from within the Fairtrade system (internal perspective) as well as from selected private / civil society stakeholders (external perspective).

The consultants will conduct phone or Skype interviews with key internal and external stakeholders. The interviews will be conducted as semi-structured interviews following the guideline agreed in the inception phase (see Annex). For the study a number of around 20 interviews is proposed. The final list of interview partners will be agreed upon with Fairtrade International. Some key interviews can be conducted by two consultants to allow for a triangulation of evaluator's perspectives, but the major part will be conducted by one of the consultants.

Proposed internal interviewees are:

1. Fairtrade Director of Monitoring, Evaluation and Learning, Dr. Arisbe Mendoza, a.mendoza@fairtrade.net
2. Fairtrade Director of Standards, Gelkha Buitrago, g.buitrago@fairtrade.net
3. Development Policies Manager, TransFair e.V., Martin Schüller, m.schueller@fairtrade-deutschland.de
4. Program and Impact Manager, Max Havelaar France, Paul Belchi, p.belchi@maxhavelaarfrance.org
5. Fairtrade International Climate Change Senior Advisor, Lannette Chiti, l.chiti@fairtrade.net
6. Representative (field staff) of Fairtrade Africa (FTA) on environmental / climate change / biodiversity issues, to identify through Isaac Rewa (see below)
7. MEL representative of FTA, Isaac Rewa, i.rewa@fairtradeafrica.net
8. Representative (field staff) of the Producer Network Latin America (CLAC) on environmental / climate change / biodiversity issues, to identify through Ileana Resendez (see below)
9. MEL representative of CLAC, Ileana Resendez, ileana.r@clac-comerciojusto.org
10. Representative (field staff) of the Network of Asia and Pacific Producers (NAPP) on environmental / climate change / biodiversity issues
11. MEL representative of NAPP, Bilal Afroz, bilal.afroz@fairtradenapp.org
12. FLOCERT: contact Theresa Glammert (t.glammer@flocert.net) to identify suitable interview partner(s) e.g. a senior manager and / or an auditor *(note: once the case studies are identified names of particular auditors can potentially be identified to find out more about recent audit results of these POs)*

The list for interviewees will be jointly finalized. The above listed interviews will be carried out before conducting the case studies and inform the decision-making process regarding the selection of the case studies.

Initially it was planned to conduct an online survey to assess the perception of external (mainly private) stakeholders and more importantly their demand regarding environmental / biodiversity / climate change adaptation impact by Fairtrade and their potential support on these topics. After screening the existing data, the consultants propose to leave out the online survey and rather conduct five to eight individual interviews with external stakeholders. This way more qualitative and in-depth information from outside the system can be gathered.

Purpose of these additional external interviews:

- To capture the perception around impacts of Fairtrade on the environment, climate change adaptation / resilience and biodiversity conservation from a broader external audience (private and civil society).
- To capture demands / expectations from these stakeholders towards Fairtrade on these topics.
- To collect ideas on how these actors could support in these issues.

The following organizations / individuals are proposed for these interviews to get some first-hand feedback from NGOs, from retail and from the different product segments (flowers, bananas, coffee, tea and cocoa):

13. Forum Fairer Handel, Manuel Blendin
14. ISEAL Alliance, Patrick Mallet, patrick@isealalliance.org (or he could indicate right contact)
15. BLUME2000, Ina Reinders, ireinders@blume2000.de
16. Port International, Julia Röder, julia@port-international.com
17. REWE Gruppe, Ralf Philippi, ralf.philippi@rewe-group.com
18. Tchibo, Stefan Dierks, stefan.dierks@tchibo.de
19. Ethical Tea Partnership, Heleen Bulckens, heleen.bulckens@ethicalteapartnership.org
20. German Initiative on Sustainable Cocoa, Beate Weiskopf, beate.weiskopf@giz.de
21. Global Nature Fund, Stefan Hörmann hoermann@globalnature.org; (Marion Hammerl marion.hammerl@

bodensee-stiftung.org)

Furthermore, individual stakeholders will be contacted via email with a formatted questionnaire to receive broader external feedback. Purpose of this stakeholder consultation is the same as for the external interviews. These stakeholders include:

22. Dallmayr, Johannes Dengler, Johannes.dengler@dallmayr.de
23. Hacofco, Katharina Nielsen, k.nielsen@hacofco.de
24. Global Coffee Platform, Annette Pensel, pensel@globalcoffeeplatform.org
25. Helvetas, Andrea Bischof, Andrea.Bischof@helvetas.org
26. LIDL, Florian Schütze, florian.schuetze@lidl.com
27. Kaufland, julia.dinkelacker@kaufland.de
28. Weltladen Dachverband, Steffen Weber s.weber@weltladen.de, Anna Hirt a.hirt@weltladen.de
29. NABU, Olaf Tschimke
30. Nitidae (French NGO in development domain working with Fair Trade stakeholders)
31. BASIC (consultancy firm with strong knowledge on Fairtrade movement)
32. Malongo (coffee licencee)
33. Lobodis (coffee licencee)
34. Sati (coffee licencee)
35. Méo (coffee licencee)
36. Café Dagobert (coffee licencee)
37. Café Richard (coffee licencee)
38. Maison O. JOBIN & Cie (coffee licencee)
39. Araku (coffee licencee)
40. La route des comptoires (tea licencee)
41. Diffussence (tea licencee)
42. Compagnie Fruitière (banana licencee)
43. Carrefour (distributor)
44. Système U (distributor)
45. Intermarché (distributor)

The list will be finalized jointly. Where contact information is missing, this will be provided by the respective Fairtrade organization. Interviews with external stakeholders can be conducted after carrying out the case studies. Identified hotspots could serve as inputs for these interviews.

For both types of interviews as well as the email questionnaire, the interview guidelines can be found in the Annex. According to further findings of the study, interview guidelines might be adjusted.

3.3.4 Case studies

Purpose:

- To capture the experience and perception around impacts of Fairtrade on the environment, climate change adaptation / resilience and biodiversity conservation by selected Producer Organizations
- To cross-check SCORE data within Key Informant Interviews with PO management and PN staff, within Focus Group Discussions as well as potentially via field visits
- To collect relevant information from 1 – 2 individual farmers for communication purposes by Fairtrade International (inputs for real-life-stories)

Based on the findings from the desk study and the interviews, case studies will be selected. For the selection of the case studies, we propose the following process:

Basic criteria to be met by each case study:

- Regions: Case studies are conducted in three countries (one per Fairtrade region) in Africa/Middle East, Asia/Pacific and Latin America/Caribbean.
- Products (coffee, cocoa, bananas, flowers, tea and cotton): At least Fairtrade's most important products, i.e. coffee, cocoa and bananas will be covered. If two different products (i.e. either coffee, cocoa or bananas plus flowers, tea or cotton) can be analysed in one country (e.g. one SPO and HLO case study) more products than these three might be covered.
- Importance of the country for the Fairtrade system: Total certified volumes sold, percentage of Fairtrade sales vis-à-vis non-Fairtrade volumes sold in a given country and / or number of certified farmers may be considered.
- Type of producer organization: SPO case studies have a priority. Overall, two HLO case studies are likely and three (to four) SPO case studies.
- Timeframe under Fairtrade certification: Depending on when environmental criteria have been introduced to the Standards, the POs for the case studies ideally have a track record of even before then. This would

plausibly undermine the contribution of Fairtrade Standard implementation to any found impacts. The selected case studies should at least be part of the Fairtrade system since 2010. *Note: The consultants are aware that information on timeframe under Fairtrade certification is not available in the delivered data sets. The Producer Networks do know how long a specific PO has been certified for though. Thus, this criterion can only be checked with the PN once a rough shortlist on potential case studies exists.*

- Multiple certification: If possible, Fairtrade should be the only certification of the selected case studies. Producer organizations that also count on UTZ or Rainforest Alliance certification shall not be considered for this study as they would not allow attributing environmental, climate change adaptation or biodiversity impacts to Fairtrade. As for any organic certification it might be the case that the PO only achieved this certification due to higher Minimum Prices and Premiums by Fairtrade for organic products. This line of argument could be checked allowing for two to three case studies that also count on organic certification and / or trying to identify case studies that count on organic certification not longer than three years. At least three case studies should aim for POs certified under Fairtrade only though. *Note: The consultants are aware that information on any other certification is not available in the delivered data sets. The Producer Networks do know about other certifications of the POs. Thus, this criterion can only be checked with the PN once a rough shortlist on potential case studies exists.*

Additional criteria to consider though not as a priority are:

- Location of the Producer Networks: For a close cooperation with the Producer Networks (PN) a representative of the Producer Network should be based in the country or be able to support on ground work.
- Environmental performance: Based on the SCORE data case studies will be identified that perform differently on environmental compliance criteria. Three good performers and two to three bad performers will be chosen.
- Premium use: Based on the CODImpact data three case studies will be identified that have invested their Premium money in environmental themes and two to three that have not done so.
- List of environmental projects: Fairtrade International provided a list of environmental projects funded by donors and with Premium money. Once a first shortlist exists based on the criteria above it will be checked which of the shortlisted POs are involved in such a project. For two to three case studies the consultants will aim for POs that are involved in such a project, for at least three case studies they will aim for POs that are not involved. This way impact attribution to Fairtrade engagement on the ground will be possible.

The following process shall lead to case study identification:

- Application of the basic criteria to the SCORE and CODImpact data by the consultants. This way a first shortlist of suitable POs will be generated. There is a strong interest from Fairtrade Australia to include a case study in Papua New Guinea. The consultants will include the proposed PO in this first shortlist and will then see how it performs against the remaining criteria.
- This shortlist will be circulated and discussed with Fairtrade International. The importance of the country for the Fairtrade system and the potential support by the Producer Networks will likely rule out some shortlisted POs.
- After this initial revision the shortlist will be shared with the PNs to cover the critieria timeframe under Fairtrade certification, multiple certification and location of Producer Networks.
- With the feedback from the PNs the shortlist will be revised again by the consultants against the criteria regarding the list on environmental projects.
- If several POs still remain on the list after this process, a random selection via Excel (random numbers) will be applied to the remaining shortlist to identify the target producer organizations. This means: Excel has a function to generate random numbers in a given range (e.g. 1 – 1,500). All POs will be lined up (1 to XY) and thus have an assigned number. 5 – 6 random numbers will be generated to choose the case studies. A backup of 5 - 6 case studies will be drawn up the same way in case an identified PO does not want to participate. *Note: The consultants are aware that the PNs might have strong opinions on most suitable POs of the shortlist. If a random selection is not possible due to this interest, the consultants will revise how to best come to a final selection and will document the process transparently.*
- The chosen POs will then be contacted (via the PNs) and based on their feedback inclusion as a case study will be agreed upon.

Participation in the case studies, of course, will be based upon mutual consent and is at all times voluntary for the producer organization.

The methodology for the case studies involves different steps: In preparation for the field trips additional information on the respective SPOs and the sectors is requested, reviewed and analysed. The evaluators will visit the respective countries, hold Key Informant Interviews (KII) with the respective Producer Network staff and potentially external stakeholders (private, public or civil society actors – to be agreed upon with the PN before the country visit), carry out individual interviews with producers and potentially hold Focus Group Discussions (FGD) with the SPO. Field visits may be carried out depending on time and accessibility of the agricultural production sites. Thus, the case studies furthermore serve as one more source of data collection for the evaluation. Inputs derived from the producers serve to cross-check consistency of the Theory of Change.

During the time in the country inputs for real-life stories featuring one or two individuals from the selected SPO are collected. The purpose of the real-life stories is to deliver inputs for communication purposes for Fairtrade. Where possible one woman and one man per case study are selected that count on Fairtrade certification for at least five years (see criterion on timeframe under Fairtrade certification) and are able to look back on "before" and "after" certification and changes regarding the environment, biodiversity and climate change impacts that came about. Information on these individuals (table format), photos and quotes shall allow for Fairtrade to develop communication material around these individuals and tracking back the selected farmers for future reference.

For the FGD the consultants can draw on elements from the MAPP methodology which FAKT has already worked with in the past. MAPP is a participatory impact analysis method used to systematically ascertain the impact of development policy measures, including non-intended impacts. Based on group discussions, the method uses a set of different instruments which make it possible to come up with a robust assessment of changes on the ground, to assign impacts to measures, and to identify intended and unintended impacts. The methodology includes *inter alia* a lifeline, a trend analysis and an influence matrix.

At the end of each country visit initial results and gathered feedback will be presented in a wrap-up workshop, which will allow for validating and fine-tuning results as well as informing involved persons on further steps.

3.3.5 Data analysis and report writing

The gathered information and data from the desk study, online survey, interviews and case studies will be analysed. Findings will be derived from all the gathered information. The consultants will compile all findings and recommendations in the final report. The draft report will be circulated for comments.

In addition, a PowerPoint presentation with the main findings and recommendations will be prepared and presented in-person for discussion and as commenting opportunity. Finally, all received comments will be incorporated in the final report as far as possible. Timing and process on commenting and inserting feedback have been agreed upon in the kick-off meeting (see 4.2.1).

The proposed report structure is as follows:

I. Executive Summary

II. Policy Brief

1. Introduction

    1.1 Background to the study

    1.2 Objectives of the study and evaluation questions

2. Evaluation approach

    2.1 Methods and data

    2.2 Implementation

3. Major results

    3.1 Perceived key environmental problems (hotspots) by the Producer Organizations

    3.2 The impact of Fairtrade regarding the environment, biodiversity conservation and climate change adaptation and resilience (note: the below sub-chapters may be presented in one chapter depending on results)

        3.1.1 The impact of the Fairtrade Standards

        3.1.2 The impact of Fairtrade's engagement on the ground

        3.1.3 The impact of the Fairtrade Premium

        3.1.4 The aggregated impact of all three intervention options

    3.3 Non-intended economic and social impacts from environmental approaches

    3.4 The role of gender regarding environmental issues

    3.5 Demand and potential support regarding environmental issues by stakeholders (results from external interviews and email survey)

4. Conclusions and recommendations

5. Annex

    5.1 Bibliography

    5.2 List of interview partners (upfront interviews)

    5.3 Schedule of activities (overall)

    5.4 Evaluation matrix

    5.5 Interview guidelines

    5.6 Terms of Reference

The case studies will not be part of the final report. They will be provided as separate documents and will include the following information:

0. Executive summary

1. Introduction

2. Evaluation approach (methods and data)

3. Introduction to the case study

4. FAKT TEAM – DIVISION OF TASKS

For the implementation of the study, FAKT proposes an interdisciplinary team consisting of Ms. Kerstin Linne as consultant and team leader, Mr. Mario Donga as consultant, Ms. Christine Lottje as methodological backstopper and Mr. Lukas Bauermeister as project assistance.

Within the team there will be a close cooperation to allow the maximum benefit of the different perspectives and achieve a triangulation of the results for the study. At the same time, there will be a clear division of tasks where each consultant has her or his respective role and responsibility:

- Kerstin Linne will act as the team leader. She will be responsible for the overall communication with Fairtrade International and carry the main responsibility for the desk study, literature review and interviews and the elaboration of the study report. She will also carry out the case studies in Africa and Latin America.

- Mario Donga will be the second consultant in the team. He will participate in the initial meeting with Fairtrade International and in the desk review, interviews and report writing. He will carry out the case studies in Asia.

- Christine Lottje will act as methodological backstopper to the team on impact studies in the context of the environment. In particular, she will give advice on the methodological approach, the design of questionnaires and provide input into and quality assurance for the final report. As the team member speaking French, she can support the team with the analysis of French information. In case a French-speaking country is selected, she can also carry out this case study, although she does not have a specific background in Fairtrade.

- Lukas Bauermeister will provide project assistance for the implementation of the desk study. This includes the preparation and analysis of the available data as well as the visualization of results. He will furthermore support the data preparation and analysis of the email survey.

ANNEX

Please note: All presented data collection instruments in this Annex are to be considered as guidance. According to context specific conditions and further developments throughout the study the instruments might be adjusted. Major adjustments will be highlighted and discussed with Fairtrade International.

i. Work plan

	Activities/ Tasks	Timeline	Comments
1	Kick-off meeting	17 October 2018	
2	Inception phase: • Screening of provided inputs and data by Fairtrade International • Development of evaluation matrix • Development of selection approach for case studies • Development of data collection tools and interview guidelines (Skype/phone interviews, Focus Group Discussions, Key Informant Interviews, real-life stories) • Development of online survey approach (potential stakeholders and survey guideline) -> changed to data analysis and additional external interviews • Development of Inception Report	17 October – 7 December 2018	This includes an interim meeting for the discussion of the inception report on November 29
3	Desk study: Analysis of further contents, preparation and analysis of available data, case study shortlist	15 November – 31 December 2018	
4	Interviews: Phone/Skype interviews with relevant internal stakeholders	7 - 31 January 2019	
5	Potentially: Online Presentation to MEL working group	February / March 2019	Presentation of initial results and / or approach if possible
6	Case studies (country visits)	18 February – 13 April 2019	The results of the first case study feed into the following case studies. Exact timing depends on PO and PN availability.
7	Additional Interviews/email survey: Phone/Skype interviews with relevant external stakeholders	18 February - 20 April 2019	
8	Case study reports	1 March – 30 April 2019	Case study reports (drafts) will be submitted shortly after the country visits.
9	Data analysis and report writing	30 April – 31 May 2019	Early findings from the case studie(s) and the desk review will be available by end of April 2019
10	Presentation	June 2019	

	Activities/ Tasks	Timeline	Comments
11	Elaboration of final report	June 2019	
12	Potentially: Presentation to MEL working group	October / November	Presentation of final results (subject to contract addendum)

ii. Evaluation matrix

No.	Evaluation Question	Hypothesis	Data sources	ToC and other indicators	Comments / progress / questions
1	How do Standards and tools impact on protection of the environment, biodiversity conservation and climate change adaptation/ resilience? Strengths? Weaknesses?	Implementation of the Standards provides benefits for the environment, biodiversity and regarding climate change resilience / adaptation	SCORE data CODImpact MEL data Interviews KII Desk study Data collection during case studies	Degree of resilience to climate change within PO member and worker communities (existing ToC impact indicator) Reduced amount of damages and losses of production (new impact indicator) Enhanced application of environment-friendly production techniques (new impact indicator) ToC indicators on outcome level: (1) usage of hazardous substances, (2) sustainable water use, (3) GHG reduction/ sequestration, (4) yield for Fairtrade production, (5) barriers to using Good Agricultural Practices, (6) training on Good Agricultural Practices, (7) measures to ensure waste is managed in an environmentally responsible way	There are seven relevant indicators on outcome level. On impact level only one indicator could be identified as relevant for environmental protection, climate change adaptation/resilience and biodiversity conservation (see additional document on analysis of ToC). The indicators at outcome level will be screened based on the results of the data analysis; e.g. compliance according to SCORE data on pesticide application might be low, which would have an influence on the outcome-level indicator on hazardous substances. Such findings will be documented and serve as inputs for the case studies.
2	How does capacity building impact on protection of the environment, biodiversity conservation and climate change adaptation/ resilience? Strengths? Weaknesses?	Capacity building through the Fairtrade system provides benefits for the environment, biodiversity and climate change resilience / adaptation	SCORE data CODImpact MEL data Interviews KII Desk study Data collection during case studies		

No.	Evaluation Question	Hypothesis	Data sources	ToC and other indicators	Comments / progress / questions
3	How does the Fairtrade Premium impact on protection of the environment, biodiversity conservation and climate change adaptation/ resilience? Strengths? Weaknesses?	The Fairtrade Premium provides benefits for the environment, biodiversity and climate change resilience / adaptation	SCORE data CODImpact MEL data Interviews KII Desk study Data collection during case studies	Degree of resilience to climate change within PO member and worker communities (existing ToC impact indicator) Reduced amount of damages and losses of production (new impact indicator) Enhanced application of environment-friendly production techniques (new impact indicator) ToC indicators on outcome level: (1) usage of hazardous substances, (2) sustainable water use, (3) GHG reduction/ sequestration, (4) yield for Fairtrade production, (5) barriers to using Good Agricultural Practices, (6) training on Good Agricultural Practices, (7) measures to ensure waste is managed in an environmentally responsible way	
4	How do the three instruments (Standards, capacity building, Premium) in aggregate impact on protection of the environment, biodiversity conservation and climate change adaptation/resilience across products and geographies? Strengths? Weaknesses?	The co-existance and combination of these three instruments provides benefits for the environment, biodiversity and climate change resilience / adaptation	Correlation of results on evaluation questions 1 – 3 MEL data Interviews KII		
A	What are perceived key environmental problems (hotspots) (PO perspective)?	Farmers and workers know best about environmental hotspots. These hotspots are covered in the Fairtrade Standards and by offered capacity building measures	KII Farmers / workers (FGD) Cross-check with SCORE data from the specific SPO	Negative impacts on livelihoods due to environmental problems	
B	Are there non-intended economic or social impacts from environmental approaches?	Fairtrade interventions on environmental issues (Standard implementation, capacity building, Premium) benefit the other two sustainability dimensions	Interviews KII Farmers / workers	Negative impacts on livelihoods due to environmental approaches	

No.	Evaluation Question	Hypothesis	Data sources	ToC and other indicators	Comments / progress / questions
C	Which gender is more important to target environmental interventions (gender perspective)?	Men and women have different influences on environmental issues - mostly men are trained on environmental issues while women carry out the bigger share of the work in agricultural production	Interviews KII Farmers / workers	Percentage of women/ men benefitting from environmental intervention Percentage of women/ men contributing to implementation of environmental intervention	

iii. Outcomes and agreements of the kick-off meeting (17/10/2018)

Most important outcomes of this meeting are as follows:

- KL and MD communicate with JH only unless connected / introduced to other persons in the system
- As of December (after finalization of the Inception Report (IR)) 3-weekly-update calls are planned
- Out of environment, climate change and biodiversity, biodiversity is the least important; environment and climate change are more the priority
- The indicator set to track effectiveness of the Theory of Change (ToC) should be used as much as possible; however, the consultants are free to adjust or even find new indicators as necessary
- CodImpact data 2014-16 gives good indications for case study identification plus SCORE and Monitoring, Evaluation and Learning data
- Impact Monitoring data will be shared as indicated —> KL and MD are to identify necessary modules / questions to have data on (household and SPO level)
- JH will find out the criteria that led to choosing the case studies for the MEL Impact data
- JH finds out / puts KL in touch with Director of Standards to find out when environmental criteria have been integrated. It might be possible to revise audit results of the case study producer organizations before and after environmental criteria have been integrated. For this purpose it would be good to identify organizations that have been in the system that long.
- The IR is to include a Statement of Research Ethics and Protocol as well as the final report structure
- The online survey rather has a focus on the demand (what do stakeholders want / need / expect) and support (what can stakeholders offer). To have these results as input for the case studies is not necessary. Thus timing has to be considered; the online survey can be implemented at a later stage (after January 2019).
- Multi-certification (especially organic certification) of the producer organizations for the case studies should be avoided if possible in order to avoid attribution gaps of environmental impacts.
- Fairtrade International would like to include counterfactuals, KL and MD are not in favour of this; once the case studies are identified and if Fairtrade International identifies suitable counterfactuals (same region, same product, same size, same organizational structure, etc.) the question could be revisited. KL and MD will not engage in counterfactual identification. In case a counterfactual is identified and taken up this may likely have impacts on time and budget.
- Case study reports will be sent bit by bit as they're ready. 2-3 weeks for commenting are planned in.
- 2-3 weeks of commenting for final report are planned in. Feedback is then included, the revised report shared and presented in-person. This presentation is the final opportunity for commenting on the results and the report. One week after the in-person presentation the consultants provide the final report including the last received feedback. Further commenting and adjusting is

then no longer possible.

- In March 2019 a MEL meeting is planned, potentially a presentation on the current status might be planned alongside. Budget implications might be discussed as necessary.

iv. Semi-structured interview guideline (for internal interviews)

Method: phone or Skype interviews

Target Group: key internal and external stakeholders of Fairtrade (approx. 20)

Agenda/ Structure of interview:

1. Clarify background of the interview and the study
2. Highlight that participation is voluntary
3. Point out that information will be presented anonymously
4. Take note of name, contact details and job title of interviewee for internal purposes only
5. Make clear for what purpose and how the results of this interview are used
6. Give a short overview of interview structure and time requirement
7. Carry out interview (according to interview guideline)
8. Ask for recommendation and reasoning for selecting a certain PO as case study
9. Next steps and give thanks to interviewee

Main statistical data:

Interview data	
Name of interviewer	
Organization	
Names and function of interviewee	
Contact details of interviewee	
Date of interview	

Interview guideline:

Note: The interview guidelines shall be handled flexibly. Interviewees will not be asked all the below mentioned questions. Questions will be targeted based on role/ knowledge of informant revealed in the introduction and during first questions.

General reflection on the performance of Fairtrade on protection of the environment, biodiversity conservation and climate change adaptation/resilience.

Relevance

1. How important is it to you that Fairtrade contributes to protection of the environment, biodiversity conservation and climate change adaptation/resilience?
2. What is the most promising approach of Fairtrade to foster those environmental topics? What kind of contents, approaches, tools, methods or concepts promoted by Fairtrade do you consider as most relevant?

3. What is missing to make Fairtrade even more relevant for those environmental topics?

4. To what extent does Fairtrade contribute to the implementation of national/international environmental standards/ agreements/policies?

Effectiveness

5. What are the most important environmental/biodiversity conservation/climate change adaptation (CCA) effects achieved by Fairtrade International so far? Why do you consider them as important?

6. Overall, would you judge Fairtrade's environmental/biodiversity conservation/CCA effects as being effective? Why / why not? What were the main challenges?

7. Who do you think is more important in environmental protection/biodiversity conservation/CCA – men or women? Why?

8. Who benefits the most from environmental interventions (e.g. trainings), women or men? And who carries out the bigger share of the work in agricultural production?

9. Which recommendations would you have in order to improve the effectiveness of Fairtrade's environmental/biodiversity conservation/CCA impact?

Impact

10. Overall, do Fairtrade's environmental/biodiversity conservation/CCA impacts contribute to development of the POs and communities? How?

11. In contrast to other certification schemes, how do you rate Fairtrade's environmental/biodiversity conservation/CCA impacts?

12. Are there also any negative economic and/or social impacts attributed to environmental/biodiversity conservation/ CCA interventions?

Efficiency

13. Overall, would you judge Fairtrade's engagement on environmental/biodiversity conservation/ CCA impacts as being efficient, i.e. has it reached the maximum possible results with the available resources? How do you know (Examples)? Do they use, for example, locally adapted solutions to environmental/biodiversity/climate change (CC) problems, or have producer groups been able to attract counterpart contributions and / or other donors and / or projects?

Sustainability

14. Overall, do you think that the results achieved will be sustainable, i.e. will they sustain on their own? If not, why?

15. Do you think the positive impacts of Fairtrade's environmental /biodiversity conservation/CCA approach are already being institutionalized within the PNs, POs and among farmers?

16. What are the lessons learnt so far?

Suggestions for future activities

17. Where/what should future activities of Fairtrade focus on? Which aspects need special attention? Why?

18. What could be your role (or your organization's role) in future? How could you contribute to the successful implementation of these ideas?

19. What are the challenges? How could those be tackled?

20. What kind of support would you need? From Fairtrade? From anyone else?

Questions regarding the management of environmental/biodiversity conservation/CCA approaches of Fairtrade (policy issues)

Strategy

1. How do you integrate your interests in the design of an environmental/biodiversity conservation/CCA strategy of Fairtrade? Where (in which part of the Fairtrade approach) do you see them especially represented?

Processes

2. Does Fairtrade tackle the relevant challenges of the POs to solve their environmental/biodiversity conservation/CCA related problem?

3. Is the PO willing to change accordingly?

Cooperation

4. Which stakeholders are especially relevant for the achievement of Fairtrade's environmental/biodiversity conservation/CCA impacts? Which stakeholders and contributions are missing?

5. What is your role and responsibility? Are you satisfied with it? What needs to be improved?

6. Are there similar (synergetic or competing) activities from other (international) stakeholders? How is/was Fairtrade's approach aligned with them?

Steering structure

7. Where and how are decisions regarding Fairtrade's environmental/biodiversity conservation/CCA approach taken? On which basis are those decisions taken?

8. Does the monitoring system play a role for those decisions?

Learning and Innovation

9. What kinds of spaces or fora do exist for the reflection on Fairtrade's environmental/biodiversity conservation/CCA performance and for institutional learning? Are those options sufficiently used?

10. Are lessons learnt jointly analysed and documented?

11. Where are those lessons learnt used so far? By whom?

v. Schedule for country visits (case studies)

Day	Activity
1	International travel and arrival
2	Meeting with PN and PO to clarify objectives and schedule Last preparations where necessary KII with PN and potentially others (external stakeholders)
3	FGD 1st case study in the country (if 2 are carried out) potentially including field visit (transect) *Note: PO management will likely have to support regarding the organization*
4	Collection of up to two real-life story inputs (i.e. visiting two farmers)
5	Local travel
6	FGD 2nd case study in the country (if 2 are carried out) including potential farm and/or field visits
7	Collection of up to two real-life story inputs (i.e. visiting two farmers)
8	KII with PN and potentially others (external stakeholders); summary and initial assessment of findings
9	Wrap-up workshop with PN, PO representatives and potentially external stakeholders
10	International travel

vi. Guidance for Key Informant Interviews

Key Informant Interviews will take place with relevant PN staff, PO management, a member of the Fairtrade Premium Committee and potentially external stakeholders from public, private and / or civil society backgrounds. A list of interviewees will be agreed upon with the PN before the country visit takes place as to enable preparation and of all KII. A fixed format for the KII does not exist, but aspects to cover during the KII include:

1. Personal information (name, company, job title)
2. Relation of the interviewee to Fairtrade
3. Perception of the current status of production sites under Fairtrade POs regarding environmental sustainability, biodiversity conservation and climate change adaptation and resilience
4. Perception of the role of Fairtrade Standards, capacity building and Premium investments regarding environmental sustainability, biodiversity conservation and climate change adaptation and resilience
5. Ideas on how to improve environmental sustainability, biodiversity conservation and climate change adaptation and resilience with a view to Fairtrade interventions
6. Other issues that may come up / the interviewee likes to discuss

A KII is to take up to an hour, participation is voluntary, and all information will be presented anonymously.

Name	
Company	
Job title	
Relation to Fairtrade	
Perception of the current status of production sites under Fairtrade POs regarding environmental sustainability, biodiversity conservation and climate change adaptation and resilience	
Perception of the role of • Fairtrade Standards • Capacity building • Premium regarding environmental sustainability, biodiversity conservation and climate change adaptation and resilience; Role / impact of these three aggregated? Strengths? Weaknesses?	
What are environmental hotspots in the given crop and country?	
Are there non-intended economic or social impacts from environmental approaches?	
How to improve environmental sustainability, biodiversity conservation and climate change adaptation and resilience with a view to Fairtrade interventions?	
Which gender is more important to target environmental interventions? Why?	
Hopes / desires / goals for Fairtrade on environmental issues?	
AOB	

vii. Concept for Focus Group Discussions

Method: face-to-face 1 to 1.5-day-workshop during case study mission (best to be applied during field visit)

Target Group:

In the case of SPO: PO farmers in mixed groups comprising both sexes, etc. For selected questions/sections and according to the cultural context, sexes will be divided in groups to allow females to give their honest input.

In the case of HLO: technical staff of the company, workers (comprising both sexes)

Number of participants: Max. 10

Agenda:

1. Welcome notes
2. Clarify background to the FGD and the study
3. Get consent on voluntary participation and highlight that participation will not have any negative impact regardless of the outcome
4. Presentation of participants
5. Make clear for what purpose and how the results of this interview are used
6. Give a short overview of FGD and time requirement
7. Application of MAPP-method (steps 1-4/5)
8. Ideas on how environmental/biodiversity/climate change aspects could be strengthened
9. Conclusion, next steps and closing of gathering

Main statistical data:

FGD data	
Location	
Date	
Participants' names and functions (as mentioned in attendance sheet)	

Context data of local organization	
Location	
Producer organization name	
PO ID	
Crop(s)	
No. of members	
Standard	SPO 0 HL 0

MAPP-Steps[3]:

1. Life curve: Together with the audience a life curve is being developed. The curve shows the overall development trends in the community/PO along the last around eight to ten years beginning before Fairtrade International introduced environmental criteria in its approach and ending at present, making it possible to compare the situation and identify changes.

Time requirement: 45 min.

Material needed: large paper, pens, pin cards, pins (or tape)

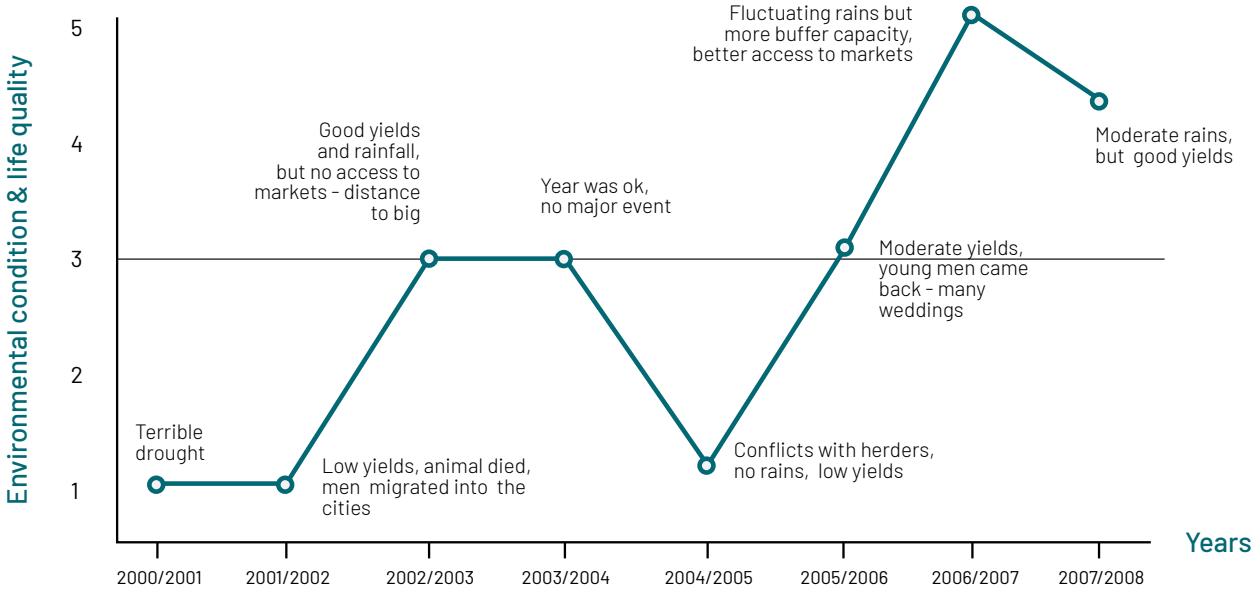


Fig. 1: Example of a life curve

2. Trend analysis: Together with the audience a matrix is being developed. With this matrix, detailed development trends are evaluated over the period of the last eight years. Firstly, the indicators (aspects) for development are agreed upon with the participants. To save time, it is proposed to start with a set of given indicators. In the context of our assessment the following aspects and indicators are suggested:

1. Improvement of livelihoods

- a) agricultural yields
- b) family income

2. Access to agricultural resources and services

- a) to seeds and pesticides/ fungicides
- b) to fertile soils
- c) to knowledge on environmental friendly and resilient production

3. Resilience of livelihoods regarding

- a) climate-related disasters
- b) pests and plant diseases
- c) environmental pollution and environmental degradation

Following completion of this, the overall trends for each dimension can be noted.

Time requirement: 45 min.

Material needed: large paper, pens, pin cards, pins (or tape), red dots stickers

3 Source of the methodology and figures: S. Neubert (2010): Description and Examples of MAPP (Method for Impact Assessment of Programmes and Projects).

	Year programme starts ⇩								
	2000/ 2001	**2001/ 2002**	**2002/ 2003**	**2003/ 2004**	**2004/ 2005**	**2005/ 2006**	**2006/ 2007**	**2007/ 2008**	**Trend 2001-2008**
Improvement or impoverishment of living standard									
Agricultural yields	●●	●●	●●●●	●●●	●●●	●●●	●●●●	●●●[1]	+
Family incomes	●●	●●	●●	●●●	●●●●	●●●●	●●●●	●●●●	++
Health of children	●●●●	●●●	●●●●	●●●●	●●●●	●●●	●[2]	●●	--
Access to or exclusion from resources									
...to firewood	●●●	●●●	●●●	●●●	●●●	●●●●●	●●●●●	●●●●●	++
...to drinking water	●	●	●	●	●	●●●[3]	●●●	●●●	++
...to markets	●	●	●	●	●	●●●●	●●●●	●●●●	++
...to fertile lands	●●●●	●●●	●●●	●	●●	●●●[4]	●●●●●	●●●●●	++
Enlargement or diminishment of knowledge									
School enrolment	●	●	●	●	●	●●●●●	●●●●●	●●●●●	++
Knowledge about land use systems	●●	●●	●●	●●●●●	●●●●●	●●●●●	●●●●●	●●●●●	++
Participation in or exclusion from rights and power									
Peaceful living with herders	●●●	●●●	●●●	●●●	●	●	●	●	--
Avoided migration	●	●●	●	●●●●	●●●●	●●●●	●●●●	●●●●	++

Legend: ●●●●● very positive // ●●●● positive // ●●● average // ●● negative // ● very negative

[1] *The yields depend mainly on rainfall and in 2008 the rains were very bad. But because of PORO the yield impacts were less pronounced.*

[2] *Many meningitis cases, many children died.*
[3] *Through the anti-erosive measures, water could infiltrate much better and the water table rose up again.*
[4] *Stone walls and biological anti-erosion measures (tree planning, hedges, etc) improved soil fertility remarkably.*

Fig. 2: Example of a trend analysis matrix

3. Impact Tree Analysis: This analysis could especially be useful in the case of HL Focus Group Discussions, since the high turnover of workers often does not allow for a thorough trend analysis (and can thus replace or complement Step 2). The Impact Tree or Problem Tree Analysis is a useful tool that enables the organization to identify the root causes of negative (or positive effects) of a certain issue/situation, derived from the life curve (Step 1), and to identify its implications for the overall development of the company and/or the livelihoods of the workers/ people. Various issues/situations can be analysed by dividing the audience into smaller groups (3-4).

Time requirement: 1.5 - 2 hours

Material needed: several large papers, pens, pin cards, pins (or tape),

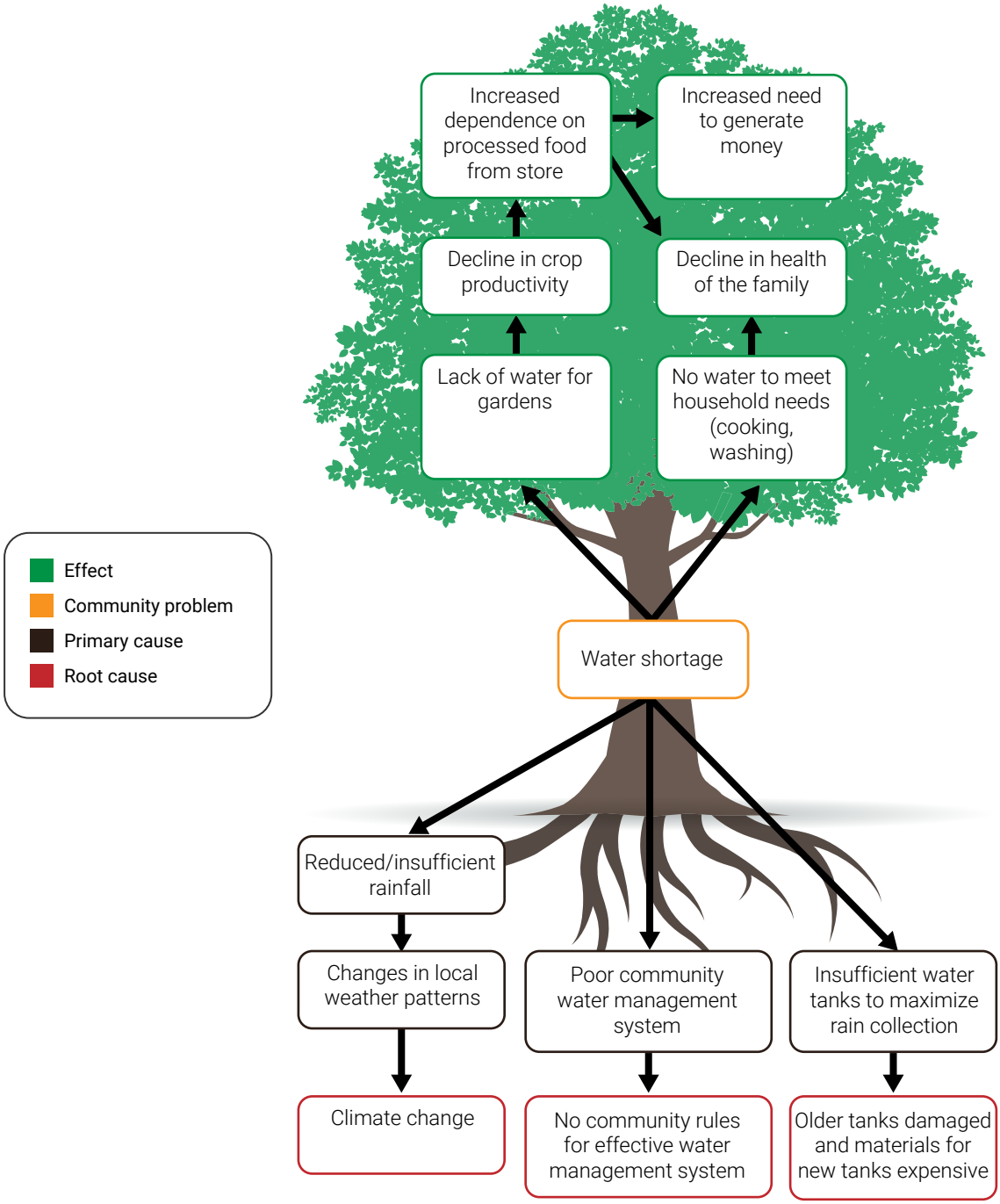


Fig. 3: Example of an Impact Tree

4. Cross-checking (to be done by consultant without all participants): Practical cross-checking tools such as transect walks along development interventions within the community can be very useful at this point (if gathering is done close to the production sites).

Time requirement: 1 - 2 hours

Material needed: guide from PO, PN and farmer representative

5. List of interventions and activities: All relevant interventions from Fairtrade International (Standards and tools, programmes and capacity building, Fairtrade Premium) as well as donor organizations, NGOs and state institutions active in the community are determined together with the participants, and listed and ranked according to their day-to-day relevance. Beneficiaries (disaggregated by gender) are identified and contributions of the beneficiaries to the implementation of activities / interventions are evaluated in terms of labour and finances by points.

Time requirement: 1 hour

Material needed: large paper, pens, pin cards, pins (or tape), red dots stickers

List of interventions and activities

Intervention/ activity	Organization	Relevance for day-to-day life[1]	Main contributors (men or women)	Main beneficiaries (men or women)	Beneficiaries as part of total population of the community	Own labour contribution (work burden)	Own financial contribution (financial burden)
Health Centre	Government	●●●●●	F	M+F	The whole community	●●●	●●
School	Government	●●●●●	F	M+F	All children	●●●	●●●●
Subsidies for donkey cart	PORO	●●●●●	M[4]	M	All male farmers	●●●	●
Irrigation scheme	PORO	●●●●●	M+F	M	Less than half of male farmers	●●●●●	●●
Nature reserve	PORO	●●●●	M	M	Few male farmers	●	●
Stone walls/ anti erosive measures	PORO	●●●●	M+F	M	More than half of male and female farmers	●●●●●	●●●
Lamb fattening	NGO1	●●	F	F	Less than half of female farmers	●●●●	●●●●
Grain bank	NGO2[2]	●	M+F	M	Few families	●●●●	●●
Tree nursery	Own initiative	●●●	F	M+F	Whole community	●●	●●
Micro credit group	Own initiative	●●●●●	M+F	M+F	Less than half of farmers	●●	●●

Legend
●●●●● = very relevant / very high burden
●●●● = relevant / high burden
●●● = average relevance / average burden
●● = low relevance / low burden
● = no relevance / no burden

M = Men
F = Women
PORO = Programme evaluated

Fig. 4: Example of a list of interventions

6. Influence matrix: The influence matrix is developed together with the group if time allows. Alternatively it can also be developed by the international consultant together with a core group of the audience. The matrix helps to evaluate the influence of all interventions on each development indicator. Afterwards, the passive and active sums are calculated. The active sum shows which intervention has most impacts on the development indicators, whereas the passive sum shows which development indicators did or did not perform.

Time requirement: 1.5 hours

Material needed: large paper, pens, pin cards, pins (or tape)

Influence matrix

Development Indicators How strong is the influence of the intervention X on indicator Y?	Interventions/activities												
	Manuring	Anti-erosive measures	Nature reserve	Irrigation scheme	Donkey cart	Pumps	Lamb fattening	Health centre	Grain bank	Tree nursery	Microcredit group	School	Σ Passive
Improvement or impoverishment of living standard													
Agricultural yields	4	4	1	3	4	2	3	0	3	3	2	0	+29
Family incomes	3	3	2	3	4	0	4	0	3	0	1	-1	+23/-1
Health of children													
Access to or exclusion from resources													
to firewood	0	0	0	0	4	0	0	0	0	4	0	0	+8
to drinking water	0	0	0	0	0	4	0	0	0	0	0	0	+4
to markets	1	0	0	0	4	0	0	0	0	0	0	0	+5
to fertile lands	4	4	4	2	4	1	2	0	0	4	0	0	+25
Expansion or diminishment of knowledge													
School enrolment	0	0	0	1	0	0	0	0	0	0	0	4	+5
About land use systems	4	4	4	2	4	1	3	0	3	4	0	0	+29
Participation in or exclusion from rights and power													
Peaceful living with herders	0	-4	-4	0	0	0	0	0	0	-4	0	0	-9
Avoided Migration	3	5	-2	4	5	1	0	2	1	1	1	0	23/-2
Σ Active	+19	+20 -4	+11 -6	+17	+33	+13	+12	+6	+10	+16 -4	+6	+4 -1	See comments next page

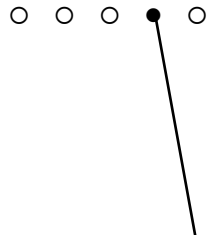
Fig. 5: Example of an influence matrix

7. Development and impact profile: The development and impact profile is developed by the international consultant together with a core group of the audience. This chart serves as an interpretation tool and summarizes some results of Steps 1-5. Reasons, data verification sources and main influential (f)actors are determined. The profile gives an impression of the robustness or vulnerability of the development.

Time requirement: 1 hour

Material needed: large paper, pens, pin cards, pins (or tape)

Development and impact profile

	Profile -- - +/- + ++	Remarks of beneficiaries	Cross-checking data, documents/ background Interview	Mainly influenced by which actor/factor
Improvement or impoverishment of living standard				
Agricultural yields		The yields depend mainly on rainfall. Because of the soil management measures supported by PORO the fluctuations can be buffered better	No yield statistics about the project region	External factors (Rainfall)/PORO
Family incomes		The income increases mainly because of the anti-erosion measures and the irrigation scheme	Project staff agreed that income trends of people are positive	PORO
Health of children		Many meningitis cases which have cost many lives of children	Nurses from the health centre confirm the cases and complain that there is no vaccine available	External factors/ Other organizations
Access to or exclusion from/to resources				
Firewood		With the donkey carts we can search in greater areas for firewood	Evaluation team: This impact is only positive in the short run. In the longer run it aggravates degradation	PORO / External factors
Drinking water		Through the stone walls water tables went up again, so we can pump water again	Staff from health centre also reported that water related diseases decrease because of that	Other Organizations
Markets		We can use the donkey carts as transport means	On the local markets more salesmen were seen than before	PORO
Fertile lands		Biological measures near the stone walls (tree planting, hedges, etc.) improved soil fertility	Soil analyses from ten plots confirm higher organic matter	PORO

Development and impact profile				
Expansion or diminishment of knowledge				
School enrolment	○ ○ ○ ○ ●	The ratio of enrolled children is 90 percent now	This reflects also the present national statistics	Government
Knowledge about land use systems	○ ○ ○ ○ ●	PORO initiated trainings and we could immediately put that knowledge into practice (construct stone walls, and other measures)	Monitoring data from the programme can confirm that directly	PORO

Alternatively/or complementarily the following semi-structured interview guideline can be used

Guiding questions for the target group (PO members, farmers, partners)

1. Did /do you face any negative impacts on your production systems? Which ones? What are the reasons / root causes for those impacts?
2. Since when do those negative impacts on your production systems persisted?
3. How did / do you tackle those problems? Has the situation improved since then?
4. What was the role of Fairtrade and/or PN to tackle those problems? To what extent was Fairtrade important? How do the Standards compel changes?
5. What are the most important environmental impacts or changes achieved?
6. What are the limitations of the Fairtrade's intervention on environmental issues?
7. What were the factors that have enabled or disabled the achievements of the objective and / or impacts?
8. Were Fairtrade's activities coordinated with other (donor/state) organizations operating in the same sector? (Complementarity)
9. Collaboration with other organizations was efficient and effective (synergies)? Conflicts of interest arose between them?
10. What are the lessons of the intervention?
11. Do you think the positive impacts of the intervention will persist? Please specify why you think so.

viii. Format for data collection on real-life stories

For PR purposes inputs for real-life stories are provided. At least one input per case study will be collected. Where possible two inputs, i.e. inputs from two individuals (man and woman) of the PO will be collected on a voluntary basis.
The following concept is proposed and will be checked with the respective PN latest during the KII to further shape it towards the specific context:

Selection of the farmer(s)/worker(s)

To serve the desired communication purpose farmers to feature in the real-life stories will be carefully chosen. Criteria to be applied include:

- Average farmer regarding farm size and yield
- Per case study ideally one woman and one man
- High(er) adoption rate of Good Agricultural Practices
- Well organized farm
- Ideally: Fairtrade certified since 2010 or even longer
- Good overview of what Fairtrade certification means for them
- Potentially: Involvement in relevant environmental projects (if applicable in the respective PO)

Together with the field staff of the Producer Networks and the PO management suitable candidates will be identified and contacted.

Participation is, of course, voluntary and based on mutual consent.

Information to gather

Introduction:

- Explain purpose of the interview: telling the producer's / worker's story regarding their production, their local environment, biodiversity and experience with changing climatic conditions
- Explain that participation in the interview is voluntary and will not lead to any positive or negative impacts for the interviewee
- Ask for permission to interview and take photos; ask them to sign the Photo Consent form
- Ask them to sign declaration that all inputs can be used by Fairtrade (Fairtrade format)

Context data	
Location	
Date	
Producer organization	
PO ID	
Crop	
Standard	SPO 0 HL 0
Individual data	
Name of the farmer / worker	
Farmer / worker ID	
Date of birth	
No. of people in household	

No. and age of children in the household	
No. of children in the household that are going to school	
Farming that crop since	
Size of land / number of plants / amount of plots	
Harvest in last completed crop season	
Income from the crop in that season	
Topic wide information	
Please briefly describe your production cycle / what do you do each month on your field? Have you noticed any changes in your crop cycle in the past 5 – 10 years? If so: how have you dealt with them?	
What are the environmental challenges you see regarding your production? How do you address these? What are the climate change challenges you see regarding your production? How do you address these? What are biodiversity challenges you see regarding your production? How do you address these?	
Are there requirements to comply with regarding the environment? If so: are you able to comply? Do you receive support to comply? What are main challenges? Are there requirements to comply with regarding biodiversity? If so: are you able to comply? Do you receive support to comply? What are main challenges? Are there requirements to comply with regarding climate change? If so: are you able to comply? Do you receive support to comply? What are main challenges?	

Have you / do you receive trainings on environmental aspects via the PO / the Fairtrade system? Have you / do you receive trainings on biodiversity via the PO / the Fairtrade system? Have you / do you receive trainings on climate change via the PO / the Fairtrade system?	
Have you invested in your production regarding environment, biodiversity, climate change in the past three crop years? Where did the money come from?	
Think of the environment and the natural resources in and around your farm. How do you see the future of your farm if everything continues as it is now?	
What would your desired future look like? What endangers reaching this dream?	
What would you need to achieve your desired future?	
AOB / Quotes	
• Photos of the farmer / farming family / worker / worker and family around the homestead • Photos of the interviewee on the farm	

Information and photos according to this concept will be handed over to Fairtrade International in written form (notes in word) / digital form (photos in jpg) as part of the results of the assignment. This does not include the writing of PR texts, designing or formatting leaflets or any such activities.

ix. Interview guideline external stakeholders

Note: For the planned email Survey a suitable format will be elaborated and shared before contacting any stakeholder. Contentwise it will be oriented along the below presented guideline for external stakeholders. Not all questions may be asked throughout each interview. This may depend on the specific interviewee and the flow of the interview.

Method: Phone or Skype interviews

Target Group: External stakeholders of Fairtrade International

Agenda/Structure of interview:

1. Clarify background of the interview and the study
2. Highlight that participation is voluntary
3. Point out that information will be presented anonymously
4. Take note of name, contact details and job title of interviewee for internal purposes only
5. Make clear for what purpose and how the results of this interview are used
6. Give a short overview of interview structure and time requirement
7. Carry out interview (according to interview guideline)
8. Next steps and give thanks to interviewee

Main statistical data:

Interview data	
Name of interviewer	
Organization	
Names and function of interviewee	
Contact details of interviewee	
Date of interview	

Code	Subject	Questions	Answers (do not offer answer options upfront but check if these are covered)	Scale Level
A	*Perception*	*Stakeholders' general perception of how Fairtrade Standards address environmental issues*		
A1		What environmental issues do the Fairtrade system and Fairtrade projects address from your point of view?	Multiple Choice + give points from [1 to 5/no answer]: • Protection of fertile lands • Protection of water resources • Protection of tropical forests • Support farmers to adapt to climate change effects such as drought, erosion • Prohibition of dangerous pesticides • Prohibition of genetically modified seeds • Support organic (bio-)production	Nominal; Intervall
A2		If you wish to sell and/or purchase environmentally friendly products, would you choose products with the Fairtrade label? Please give a reason for your answer.	Single Choice: • Yes • No • Maybe + [type text]	Nominal
A3		How can Fairtrade best support environmental and resource protection and climate change adaptation in producing countries?	Multiple Choice + give points from [1 to 5/no answer]: • Supporting producers' rights and self-organization • Lobbying for transparency in international value chains • Dissemination of certified products on the market and public sensibilization • Support for producers to certify and sell products	Nominal; Intervall
B	*Expectations*	*Stakeholders' expectations towards Fairtrade's work and certified products*		
B1		For which kinds of products do you consider environmentally friendly production most important or most critical?	Multiple Choice: • Bananas • Cocoa • Coffee • Cotton • Flowers • Sugar • Tea • Composite products • Carbon credits • Fresh fruit • Gold • Honey • Juices • Rice • Spices and herbs • Sports balls • Wine	Nominal
B2		What would retailers and consumers who are willing to support environmental protection in production expect from Fairtrade products?	[type text]	--

Code	Subject	Questions	Answers (do not offer answer options upfront but check if these are covered)	Scale Level
B3		What would retailers and consumers who are willing to support environmental protection in production expect from Fairtrade as an organization?	[type text]	--
C	*Support*	*Ways of support towards Fairtrade's work that stakeholders would consider*		
C1		Where do you see challenges in Fairtrade's work to support environmentally friendly standards in production in Africa, Asia and Latin America?	[type text]	--
C2		How can retailers and consumers best support environmentally friendly and social production?	Multiple Choice + give points from [1 to 5/ no answer]: • Donations to non-profits • Political activism and volunteering • Sale and purchase of certified products • None of the above named behaviours	Nominal; Intervall
C3		How can retailers, consumers and Fairtrade initiatives together promote environmentally friendly production standards in small-scale farming in Africa, Asia and Latin America?	Multiple Choice + give points from [1 to 5/no answer]: • Including more fair trade products in lines of supermarkets and shops • Collecting funds for fair trade projects with commercial fundraising • Supporting environmentally and socially friendly trade through CSR • Joint lobbying for transparency in international value chains • Supporting local and municipal fair trade initiatives • Other (please specify) + [type text]	Nominal; Intervall

x. The Theory of Change of Fairtrade International

The Fairtrade Theory of Change[4] (ToC) describes the changes that Fairtrade International wishes to achieve and the understanding of how the organization intends to contribute to desired immediate, mid-term and long-term changes. Respective indicators measure the progress towards Fairtrade's objectives.

The ToC provides a framework for this analysis. The methodology of this study, which is described in the following, is based on the ToC among others.

The ToC is used:

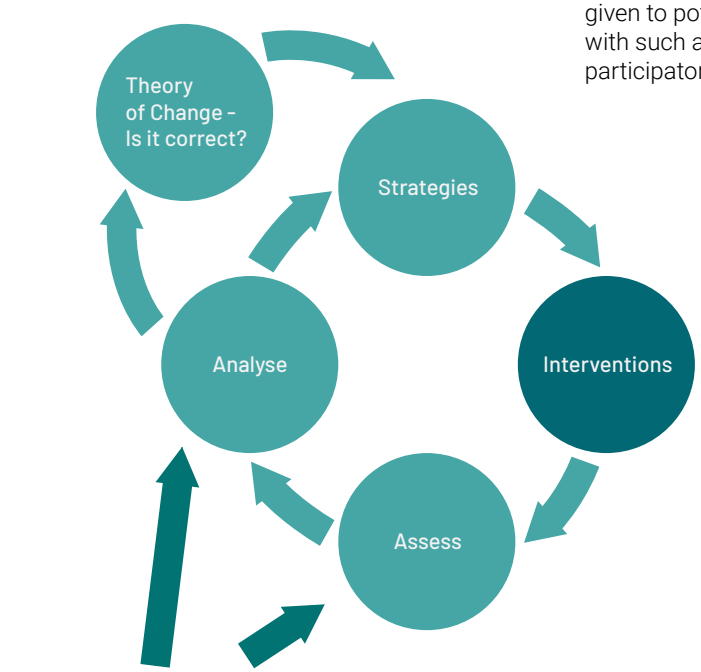
- to derive and test hypothesis underlying the Fairtrade approach - for example, that standards on environmental protection for SPOs and the use of Fairtrade Premium will result in more investment and enhanced knowledge and capacities among small producers to protect the environment and to adapt to climate change which ultimately increases environmental sustainability and resilience to climate change.
- to identify which interventions and areas of change are most critical for the achievement of Fairtrade's goals. This learning shall be used to derive recommendations for future adjustments to the interventions strategies.
- to come up with a suitable shortlist of POs to serve as case studies for further in-depth investigation on environmental impacts of Fairtrade's interventions.

The focus of this study is directly aligned with Fairtrade International's Goal 3: "Foster sustainable livelihoods". Sustainable livelihoods are defined as such when they can cope with and recover from stresses and shocks and maintain or enhance their capabilities and assets, while not undermining the natural resource base. This is why Fairtrade aims to foster sustainable livelihoods among small producers and workers (hired labour) by enabling sustainable ecosystems among others.

The pathway of change for environmental impacts for SPOs can be visualized as follows using the detailed Theory of Change for SPOs.

There are seven indicators on outcome level measuring the "Improved farming performance, protection of environment and adaptation to climate change": (1) usage of hazardous substances, (2) sustainable water use, (3) GHG reduction/ sequestration, (4) yield for Fairtrade production, (5) barriers to using Good Agricultural Practices, (6) training on Good Agricultural Practices, (7) measures to ensure waste is managed in an environmentally responsible way. Some of these indicators are included in the SCORE and /or CODImpact database and their data will be used for this study.

The only indicator on impact level is "Degree of resilience to climate change within PO member and worker communities". There is not yet a standardized methodology on how this indicator shall be measured. A reference is given to potential research teams which should come up with such a measurement, specific to context and through a participatory learning process.



Source: Fairtrade Internationl (2016)

4 *Fairtrade International (2016): Journeys to Change. Fairtrade Theory of Change.*

Interventions

Standards & certification for suply chain businesses
- Price guarantees
- Fairtrade Premium
- sustained trade

Standards & certification for Small Producer Organizations
- Business development
- Democracy, participation & transparency
- Environmental protection

Providing support to small producers & their organizations
- Support for organizational strengthening & compliance with Standards, incl. financial
- Facilitating market access
- Facilitating support from others

Building & sustaining Fairtrade markets jointly with producer & worker organizations, business & citizen-consumers
- Establishing Fairtrade concept, values & brand
- Engaging with business & citizen-consumers

Developing networks & alliances
- Strengthening networks of producers & workers
- Mobilizing civil society
- Building alliances with others

Advocacy & campaigning
- Coordinated, evidence-based campaigns
- Engaging with policy-makers & business leaders

Outputs

Enhanced acess to fair conditions & fair prices for SPOs
- Significant & sustained access to Fairtrade markets
- Supportive trading relations
- Fair prices & protection from price volatility

Increased investment in small producers, their organizations & communities
- Objective investments & individual disbursements using Fairtrade Premium
- Increased access to working & investment capital

Stronger, well-managed, democratic organizations for small producers
- Management systems for business & production
- Enhanced democracy, participation & transparency
- Transparent systems for managing Fairtrade Premium
- Linkages to communities to support local development
- Participation in Fairtrade networks & governance

Enhanced knowledge & capacity among small producers & their organizations & networks
- Management & technical capacity in SPOs
- Capacity among small producers to improve productivity and quality, protect health & enviroment & adapt to climate change
- Awareness of & commitment to human rights (labour, gender, child)
- Understanding of Fairtrade principles & practices

Increased networking & collaboration within & beyond Fairtrade around common goals
- Improved coordination & partnership for enhanced impact

Increased awareness & commitment to fair & sustainable trade among citizen-consumers, business & policy-makers
- Rise in ethical consumption & grassroots campaigning
- Business incentivized to trade fairly
- Policy-makers influenced to address unfair trade & help 'good' business thrive

Outcomes

Resilient & viable small producer businesses
- Development of markets
- Enhanced negotiation power, control &/or ownership in supply chains
- Increased profitability, reduced risk

Strong & inclusive SPOs
- Strong, accountable leadership
- Proactive child protection policy
- Inclusion of young adults
- Gender equality
- Improved labour conditions for workers

Improved farming performance, protection of environment & adaptation to climate change
- Increased productivity & quality
- Optimal use of inputs/ management of outputs
- Individual & joint ownership of productive assets
- Elimination of harmful production practices
- Sustainable management of natural resources
- Development of environmental services
- Implementation of adaptation measures

Enhanced benefits for small producers & their communities
- Improved services & support for SPO members
- Improved services & infrastructure in communities
- Support for vulnerable & marginalized groups

Increased influence for small producers (from local to global levels)
- Ability to influence Fairtrade policies & regulations
- Ability to influence local, regional & international policy

Growing proportion of trade is on Fairtrade terms (in sectors where Fairtrade operates)
- Growth in Fairtrade markets (local, regional, global)
- Growth in volumes sourced on Fairtrade terms
- Opportunities for businesses of all sizes (particularly SPOs)

Values & principles of Fair Trade increasingly mainstreamed in business practices & policy frameworks
- Business & governments take action in support of fair & sustainble trade

Impacts

Improved household income, assets & standard of living

Less risk & vulnerability, increased food security

Improved access to basic services

Increased environmental sustainability & resilience to climate change

Inter-generational sustainability of rural communities

Increased cooperation & gender equality within communities

Increased dignity, confidence, control & choice

Enhanced influence & status of small producers

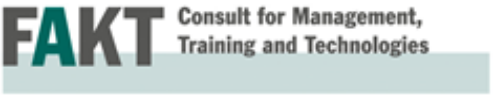
Fairer & more sustainable trading system

Fairtrade Vision

A world in which all small producers and workers can enjoy secure and sustainable livelihoods, fulfill their potential and decide on their future

Increasing influence of contextual factors
Decreasing influence of Fairtrade

Source: Fairtrade Internationl (2016)



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