

Baseline for Assessing the Impact of Fairtrade Certification on Cocoa Growers and Cooperatives in Côte d'Ivoire

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World Agroforestry Centre (ICRAF) is the world's leading centre for agroforestry research and development. Our vision is an equitable world where all people have viable livelihoods supported by healthy and productive landscapes. We work with cross-sectoral and transdisciplinary approaches with greatest attention around four priority themes: 1) climate, environmental services and landscape governance; 2) land health restoration and investments; 3) trees for resilient livelihood systems; and 4) improved tree germplasm, diversity, products and value chains. The World Agroforestry Centre is a CGIAR Consortium Research Centre. ICRAF's headquarters are in Nairobi, Kenya, with six regional offices located in Cameroon, China, India, Indonesia, Kenya and Peru.

Bioversity International is a global research-for-development organization. We have a vision – that agricultural biodiversity nourishes people and sustains the planet. We deliver scientific evidence, management practices and policy options to use and safeguard agricultural and tree biodiversity to attain sustainable global food and nutrition security. We work with partners in low-income countries in different regions where agricultural and tree biodiversity can contribute to improved nutrition, resilience, productivity and climate change adaptation. Bioversity International is a CGIAR Research Centre. CGIAR is a global research partnership for a food-secure future.

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GLOSSARY OF ACTORS CURRENTLY WORKING IN CÔTE D'IVOIRE'S COCOA SECTOR

ANADER—National Agency for Rural Development Support (Agence National d'Appui au Développement Rural) : a parastatal company created in 1993 to bring together different government extension efforts (animal production, perennial crops, vegetable farming, etc.).

CNRA—National Centre for Agronomic Research (Centre National de Recherche Agronomique) : as an Ivorian Public Limited Company (Plc), promotes sustainable agricultural and agro-industrial production through research in agriculture, livestock and forestry, production systems, conservation and processing methods.

Cocoa Fertilizer Initiative : works towards developing the agro-input markets in West Africa to make them more transparent and competitive, such as giving cocoa farmers access to fertilizers and other farm inputs in an economically, socially and environmentally sustainable way.

CPQP—Cocoa Productivity and Quality Program : aims to help transform cocoa farming into a viable and sustainable business for smallholders through a market-driven approach.

CCC—Coffee-Cocoa Council (Conseil du Café-Cacao) : oversees the cocoa and coffee sector in Côte d'Ivoire (CDI), with the mission of regulation, stabilization and development of the sector.

Fairtrade International : as a third-party standards system, structures a trading partnership between international buyers and producers and workers in developing countries. Two critical elements of the standards system are the Fairtrade Minimum Price and the Fairtrade Premium. The Fairtrade Minimum Price acts as a safety net for producers against downward price fluctuations. The Fairtrade Premium is an extra payment that farmers receive for cocoa sold on Fairtrade terms.

ICRAF—World Agroforestry Centre : generates science-based knowledge about the complex role trees play in agricultural landscapes and rural livelihoods. As part of its

work to bring tree-based solutions to bear on poverty and environmental problems, researchers work closely with partners to develop new technologies, tools and policy recommendations to increase food security and ecosystem health.

IDH—the Sustainable Trade Initiative Cocoa Program : aims to improve the livelihoods of cocoa farmers and elevate them from poverty to the middle class, while simultaneously ensuring a secure and sustainable supply of fair and high-quality cocoa for the global market.

MINADER—Ministry of Agriculture : issues licenses to cooperatives after their registration with MINADER. If unregistered, a cooperative has no legal status and cannot legally conduct business.

OHADA—Organization for the Harmonization of Business Law in Africa (Organisation pour l'Harmonisation en Afrique du Droit des Affaires)- Uniform ACT on Cooperatives (UA): provides a system of business laws and implementing institutions adopted by 17 West and Central African nations.

SOCODEVI—Cooperative Society for International Development (Société de Coopération pour le Développement International) : as a network of cooperatives, plays a vital role in strengthening the technical and organizational capacity of thousands of farmers.

SOLIDARIDAD: as an international network, focuses on four main axes: production and quality improvement; capacity building, governance and partnership; cross-cutting themes including governance and diversification; and participation in policy-processes platforms and networks.

WCF/CLP—World Cocoa Foundation through the Cocoa Livelihoods Program : aims to improve the economic sustainability of cocoa through good agricultural practices.

EXECUTIVE SUMMARY

In 2014, Fairtrade International, Fairtrade Africa, the World Agroforestry Centre (ICRAF) and Bioversity International initiated a collaboration for the development of a multidimensional baseline on small-scale cocoa farmers and their cooperatives in West Africa. The baseline is expected to provide a fuller understanding of the current situation for Fairtrade cocoa production and marketing as well as provide the foundation for rigorous assessment of outcomes and impacts of Fairtrade certification on cocoa cooperatives and smallholder households in West Africa in the future.

Côte d'Ivoire and Ghana, the two largest Fairtrade cocoa producers in West Africa, provide about 68 percent of the cocoa that is sold under Fairtrade terms in global markets. In 2013, the year this study was commissioned, the volume of Fairtrade cocoa sold from West Africa reached 133 400 tonnes, involving 71 cooperatives and producer associations and 138 800 farmers. Most of this cocoa originated from Côte d'Ivoire and Ghana.

The rapid growth in the number of cocoa-producing organizations joining the Fairtrade system in Côte d'Ivoire and Ghana provides a unique opportunity to build a baseline on Fairtrade cocoa producers in West Africa for future monitoring and impact assessment. This report focuses on the Fairtrade cocoa baseline for Côte d'Ivoire (a similar report is available for Ghana). It describes the conceptual framework and methods used in the design of the baseline, followed by an assessment of the context in Côte d'Ivoire. Key features of the baseline data at the cooperative and household levels are covered in detail. The report concludes with some recommendations to Fairtrade for expanding Fairtrade International in Côte d'Ivoire and for follow-up actions for future baseline work.

Conceptual framework and methods

The study adopted a multidimensional framework that aims to capture the impact of Fairtrade International on the livelihoods of certified cocoa-producing households, as well as changes in the business viability of the cooperatives that link these households to the market. The framework centres on endowments of productive assets, such as natural,

human, social, financial and physical capital. Underpinning the baseline is the belief that the greater the asset base of cooperatives and households, the greater their adaptive capacity and development potential.

The baseline's sample design considered two levels: the cooperative level and the household level. Five newly certified cooperatives (all certified between 2012 and 2013) were selected: Coop1 (397 members), Coop2 (614 members), Coop3 (900 members) Coop4 (625 members) and Coop5 (326 members).¹ The sample of households included in the survey (n = 422) was drawn from the five selected cooperatives, approximately 29 percent of the population of 12 selected sections that make up the cooperatives. The households within each section were selected at random from a list of members.

In addition, non-certified cocoa-producing households from communities where the cooperative sections were located were also included in the baseline. Baseline data for non-certified households were collected in five communities, selected in consultation with cooperative leaders. For each of the five communities, 20 non-certified households were selected (a total of 100 households).

The total sample of cooperative members and non-members was thus 522 households. Provisions were made to collect more data where necessary to compensate for missing data and poorly entered information. In all, 539 interviews were administered instead of the 522 initially planned.

Context for production and marketing

Côte d'Ivoire produces about 1.4 million tonnes of cocoa a year, representing about 40 percent of global production, making the country the number one producer in the world. Some 900 000 farmers grow cocoa in Côte d'Ivoire and 3.5 million of the country's 22 million inhabitants live directly from the crop. Although cocoa production accounts for about 10 percent of the GDP—while agriculture in general represents

¹ The actual names of the cooperatives that took part in the study are not used for reasons of confidentiality.

30 percent of GDP (World Factbook 2012)—it generated 37 percent of the national export earnings in 2015 (UNCTAD 2017).

The civil war in 2002 led to a lack of investment and policy incentives in the cocoa sector in Côte d'Ivoire, resulting in rapid deterioration of infrastructure (CTA 2012.). This, in turn, led to a significant drop in total cocoa production in the country. While production levels have recovered in recent years, the quality of the product is lower than that found in Ghana, as evidenced by exporters installing drying infrastructure in Côte d'Ivoire to address quality issues. Productivity of cocoa farms also remains a challenge, with few farmers replanting or maintaining their existing cocoa plantations, raising concerns for the future viability of the sector in Côte d'Ivoire.

Recent reforms in the country's cocoa sector in the 2012/2013 season have seen a shift towards increased regulation of the cocoa sector, which had been liberalized for the past 13 years. These reforms seek to restructure and regulate the sector through organizing farmers and targeting funding for initiatives to improve the quality and productivity of cocoa. They have also implemented a minimum farm-gate price for cocoa farmers to encourage them to boost output and reinvest in their cocoa farms. The changes have put the state back at the heart of the sector. The following areas are key aspects of this reform:

- Creation in January 2012 of a central body, the Coffee-Cocoa Council (CCC), that includes representatives of all stakeholders in the cocoa sector and is responsible for management, regulation, development and price stabilization of cocoa;
- Establishment of a new marketing mechanism involving the forward sale of 70 to 80 percent of the next year's crop through twice-daily auctions. The forward sales allow for the establishment of a minimum guaranteed price to farmers of 60 percent of the cost, insurance and freight (CIF²), aiming to make farmers less vulnerable to the daily fluctuation of international cocoa prices.
- Strengthening of the sector through establishment of credible and strong cooperatives. Specific activities include a census of producers and their organizations, identification of farmers and their cooperatives and elections to choose delegates to represent farmers in

the CCC. SOCODEVI, a capacity-building organization made up of cooperatives, assists in organizing cocoa farmers into producer organizations or restructuring existing cooperatives. The OHADA Uniform Act to which the Government of Côte d'Ivoire adheres makes an attempt to disconnect the bond between cooperatives and the state and gives the cooperatives more autonomy to operate as private enterprises, which may favour the growth of the cooperatives.

The presence of international NGOs and other government actors such as ANADER provide opportunities to organize farmers and improve production and quality through training. About 60 percent of ANADER's activities target the cocoa sector, including the organization of farmer field schools, aimed at improving production and quality. This includes compliance with the OHADA-UA.

Concurrent with the shift towards greater state involvement, some of the major global chocolate manufacturers, such as MARS Incorporated, have pledged to source 100 percent of their cocoa by 2020 from cocoa farms that are certified as sustainable (MARS Incorporated 2017). This means that major producing countries like Côte d'Ivoire must seek to meet such sustainable standards. Several manufacturers have partnered with various sustainability initiatives, such as Fairtrade International, Rainforest Alliance and UTZ Certified, to deliver on their sustainability commitments. There has been a rapid rise in the number of multicertified producer organizations in Côte d'Ivoire. Based on Potts et al (2014), 39 percent of the cocoa beans produced in the country in 2012 were certified by UTZ (19 percent), Rainforest Alliance (17 percent) and Fairtrade (three percent). This figure is set to increase year after year.

Cooperative assessment

Social capital

- **Membership levels.** For all the case-study cooperatives, membership increased by at least 30 percent between the years of official registration to the time data were collected (2014–2015). The case-study cooperatives were created between 2006 and 2011 and were Fairtrade certified between 2012 and 2013. The increases in membership may be attributed, in part, to non-members' perceptions of improved productivity by members, low membership fees and efforts by cooperative management to sensitize community members to join the organizations.

2 CIF = Cost, insurance and freight: term for signifying that the price includes insurance and all other charges up to the named destination port.

- **Female representation in membership.** The participation of women in cooperative activities was generally low. Two of the cooperatives had about 20 to 30 percent female membership while the rest had less than one percent. Though the cooperative leaders explained that this was because women are more interested in food crop cultivation, the household survey found that women did participate in cocoa-growing activities, though less than men. Low membership levels may also be partly because women typically do not own the farms or that the expense of joining the cooperative means that only one household member, usually the male household head, registers as a member.
- **Relationships with traders.** Cooperatives have built partnerships with a number of multinational chocolate companies, usually through capacity-building NGOs. All five case-study cooperatives claimed to have written agreements with cocoa buyers. In concrete terms, the cooperatives referred to weekly loan agreements (advance payments) they have with their buyers. The weekly loans were given by exporters to the coops to enable them to purchase cocoa from farmers and supply to them. However, cooperative leaders said that buyers were generally not satisfied with the cooperatives because they often fail to respect the terms of the agreements. The cooperatives were generally not satisfied with the level of services provided by the buyers, including the size of the weekly loans.
- **Access to services.** Three of the five cooperatives had received training from ANADER, a government-run initiative. Cooperatives were also trained by SOCODEVI, and all five cooperatives had received support from Fairtrade business advisers. These trainings covered areas such as good agricultural practices, structuring and organizing cooperatives and adhering to Fairtrade Standards. The cooperative leaders said they had benefited from a number of capacity-building programs aimed at improving group cohesion, organizational capacity and individual production techniques. They felt they had also gained a greater sense of community development from Fairtrade principles that is beneficial to their communities.
- **Multiple certifications.** In addition to Fairtrade, all five case studies were certified with at least one other certification scheme (i.e. Rainforest Alliance or UTZ Certified), some even triple certified. A question, not covered in the study that needs further examination, is how cost-effective multiple certifications are and to what extent cooperatives and their members comply with requirements of the various schemes. Efforts like those of the German development agency, GIZ, and SOLIDARIDAD to develop a training package on the requirements of the three different certifications schemes should be encouraged.

Three of the five cooperatives had gained a Fairtrade market thanks to the introduction of the Fairtrade Sourcing Programs³ (FSP) in January 2014.

Cooperatives that had received the Fairtrade Premium as a result of Fairtrade sales showed a high level of satisfaction with their involvement in Fairtrade. However, two of the five case-study cooperatives had yet to sell on Fairtrade terms. This was disappointing to the leaders of these cooperatives and they have threatened to abandon the scheme if they cannot find a market.

Human capital

- **Basic governance structures.** All of the cooperatives were structured according to the OHADA Uniform Act, which provides an organizational structure (a general assembly) for members to participate in decision making. Each cooperative had a general assembly, a board of directors, a supervisory committee and an audit team. Each cooperative also had a directorate under the leadership of a manager to oversee the day-to-day functioning of the cooperative. Some of the cooperatives also employed permanent and temporary staff, most often an accountant, a secretary and a storekeeper.

However, one issue that questions the principle of equal participation is the fact that OHADA-UA does not limit the number of shares per member. This has led to a scenario in which all of the cooperatives in the study are backed by a business 'magnate,' usually a cocoa buyer. These magnates put in the resources needed for the proper functioning of the cooperatives. Presumably, given their financial influence, such members also have a majority stake, especially in

3 *Fairtrade Sourcing Programs for cocoa, sugar or cotton connect Fairtrade farmers with companies wanting to buy these specific commodities on Fairtrade terms. Rather than focusing on all the ingredients for one final product, Fairtrade Sourcing Programs mean companies can make big commitments to sourcing one or more specific commodities for use across ranges, or even their whole business. It's one more way for businesses to work with Fairtrade, alongside certifying and labelling products with the [FAIRTRADE Mark](#).*

decision-making processes. The control in cooperatives by influential and powerful individuals clearly raises the question of the role smallholder farmers can actually have in the management of their cooperatives. It is worth mentioning that the OHADA Uniform Act states that the cooperative's constitution should specify that the organization be run democratically. Generally, the control these influential individuals claim has come from the ignorance of other members that each member has equal voting rights regardless of the number of shares. For Fairtrade cooperatives, training delivered by Fairtrade on governance plays a crucial role in reversing this situation

- **Female and youth participation in governance.**

Participation of women and youth (aged 18 to 24) in cooperative governance, including the general assembly, has been low. While figures were not available on the number of youths participating in the general assembly, participation of youth on the board of directors was about 12 percent. Despite there being relatively few women registered in the cooperatives, and with only four percent of general assembly members being women, a relatively higher number, 16 percent, was represented on the board of directors. Representation of women on the board of directors was highest among cooperatives that had Fairtrade markets. This could suggest that the number of women on the board is a reflection of compliance with the Fairtrade Standards. More interaction with cooperative leaders is needed to understand the capacity of these women to influence cooperative strategies and day-to-day operations or whether they are merely figureheads to fulfil the Fairtrade Standards.

- **Information sharing.** The main mechanism for information sharing appeared to be informal meetings. However, cooperatives could potentially make use of more effective means of sharing information and receiving input from members (via radio, cell phone). Deeper interactions are needed to identify members' needs for information and the most effective means of delivery.
- **Business and financial management capacity.** At the time of data collection, the cooperatives had a number of policy documents to guide decision making. These included a set of by-laws and the Fairtrade development plan. All of the cooperatives had a child labour policy (a key component of the engagement between Fairtrade and the International Cocoa Initiative and Cocoa Action) and an environmental policy. Evidence on

the extent to which cooperatives were implementing these policies varied and further monitoring and examination of the implementation of these policies is needed. All of the cooperatives lacked key business administration documents, including business plans and comprehensive financial records. For instance, it was not possible to accurately review the total revenues of the cooperatives and the sources of capital. It was also unclear from the records how proceeds generated from sales trickled down to members. There were inadequate details on trainings delivered and uncertainty as to the ownership of cooperative assets. The problem is that without an organized approach, cooperatives may face high risk, low transparency and expensive ways of doing business.

Physical assets

- **Infrastructure and tools.** The cooperatives have made efforts to acquire basic physical assets for production, transportation, storage and marketing, such as warehouses, tractors, measuring scales and office equipment, and there are plans to obtain more. Some of the assets were acquired through proceeds generated from cocoa sales; others from members' contributions. However, there was confusion across all cooperatives about how some assets were acquired and how they were managed. The confusion was about which were owned by the cooperative and which were owned by majority shareholders or business magnates in the cooperative. This seemed to be a common feature in Côte d'Ivoire that warrants further investigation to see whether it contributes to the overall effectiveness and efficiency of the cooperatives and to members' welfare.

Financial capital

- **Volume and quality of cocoa sold.** The volume of cocoa sold by each cooperative increased over the three years for which data were collected for this variable. Within the same period, the volume of cocoa sold under Fairtrade terms also increased for those cooperatives that carried out Fairtrade transactions. Coop5 had seen 100 percent Fairtrade sales of their cocoa for two years in a row.
- **Income sources.** Poor record-keeping made it difficult to determine total revenues of the cooperatives and to calculate the relative contribution of each source of financial capital. In general, cooperatives had varied sources of income, including cocoa sales, membership fees, premiums from certification schemes, pre-

financing from buyers and, in some cases, external loans. Proceeds from the sale of cocoa represented the most important source of revenue for all of the cooperatives. The price of conventional cocoa was fixed by the government. For the 2013/2014 cocoa season, the minimum farm-gate price was XOF 750 (USD 1.5) per kilogram and the selling price XOF 830 (USD 1.7) per kilogram, providing a commission or margin of XOF 80 (USD 0.16) per kilogram. Over the same season, the average world market price was USD 3,009/MT and, thus, almost 80% higher than the minimum price to be received by the cooperatives. The Fairtrade Minimum Price of \$2,000/MT did not lead to increased income at cooperative level, as it is set at Free on Board (FOB) or relevant market reference price level.

In addition, premiums from Fairtrade (USD 200/MT) and other certification schemes were important sources of income for the cooperatives. Participation in various certification schemes was highlighted by the cooperatives as a strategy to diversify their income sources. All cooperatives in the case study received purchasing loans from buyers that allowed them to buy cocoa from farmers. This suggests that they did not have sufficient working capital that they could mobilize from their own resources. Some cooperatives have been able to contract loans through special programs. For example, one cooperative received a loan of USD 64,000 from Shared Interest, with a cooperative union standing as guarantor. Another cooperative contracted bank loans with the same union standing as guarantor.

Cooperative managers maintained that the percentage of cocoa rejected by buyers due to low quality was small, although in most cases an exact percentage was not provided. Three of the five cooperatives had encountered cases of rejection due to quality issues. Ghanaian cocoa generally fetches a higher price in the world market than that from Côte d'Ivoire, with quality premiums of about USD 100-150/MT, though exporters in Côte d'Ivoire have their own drying infrastructure to deal with the problems of humidity of cocoa beans.

Household assessment

A total of 539 interviews took place at the household level, involving 436 cooperative members and 103 non-members. Of those interviewed, 93.7 percent were men. The mean age of respondents was 45 years. According to focus group discussions, young people are migrating to the cities to find formal employment or are attracted to other cash crops such as oil palm and rubber, posing a considerable threat to

the future viability of the cocoa sector.

Natural capital

- **Productive land in cocoa.** Sampled farmers held an average of 1.9 farm plots, with an average plot size of 3.54 ha. Total average landholdings (cocoa and non-cocoa fields) reported for both members and non-members were 6.16 ha (+/- 5.2 ha). Members had significantly higher total landholdings (6.34 ha) than non-members (5.25 ha). A majority of the farmers (52 percent) acquired land through inheritance. Land ownership was generally more secure than in Ghana.
- **Land-use diversification.** Land-use diversification was common among the sampled farmers, but more non-member cocoa fields (34.7 percent) than member cocoa fields (29.7 percent) were planted only with cocoa. The higher proportion of members who diversified their land use could be the result of awareness-raising efforts by NGOs to diversify livelihoods. Some of the cooperatives also had initiatives to encourage members to add other crops to the cocoa.
- **Cocoa productive capacity.** Both cooperative members and non-members perceived fertility of most of the fields (71 percent) to be either good or very good. The age of a majority of the cocoa farms (53.7 percent) was 10 to 29 years, which is considered to be the prime age for cocoa production. However, sampled households (both members and non-members) did not seem to be advancing towards the adoption of agricultural practices such as pruning and replanting: only 16.6 percent of both members and non-members reported cases of pruning and 10.7 percent of replanting.
- **Cocoa productivity.** Results showed a significant difference in cocoa yields among members (446 kg ha⁻¹) and non-members (370 kg ha⁻¹) (including intercropping fields). Similarly, more members than non-members reported yields higher than 500 kg ha⁻¹. However, these averages were still below the national average, estimated at 500 kg ha⁻¹ to 600 kg ha⁻¹ (Melisa 2014, Wessel and Quist Wessel 2015).

Physical capital

- **Access to agricultural equipment.** The farming households had access to basic equipment for cocoa production (e.g. manual saws, axes, machetes). About 40 percent used manual spraying machines, 11 percent

used motorized sprayers and about eight percent used modern pruning equipment. Generally, members used manual and mechanized spraying equipment more than non-members, but uptake was still very low and a key barrier to the adoption of agricultural practices that would improve productivity.

- **Access to inputs.** More members used fertilizers, but more non-members used pesticides. Generally, however, use of both pesticides and fertilizers was low across the sample. Only 40 percent of both members and non-members used insecticides; 23.9 percent used pesticides and fertilizers. The proportion of farmers who adequately applied inputs was small; for example, only 35 percent of sampled member households that used fertilizer reported using it on a regular basis. Average annual expenditures on inputs were USD 48 – USD 96 for the 2012/2013 growing season. This amount was small compared to the average size of land held by each household and thus insignificant to address issues of fertility, pests and diseases. It is worth noting that proper application of fertilizer to improve productivity issues would require USD 0.80 (XOF 400) per kilogram whereas the price of cocoa is currently at USD 1.60 (XOF 800) per kilogram. Trials have shown that the expected rise in production from the proper application of inputs is often insufficient to compensate for the cost of fertilizers (Ruf and Beni 2011).
- **Access to communication and healthy living conditions.** Ninety percent of the sampled cooperative members owned a mobile phone and about 80 percent used radios. However, the sample showed limited access to other assets that have major implications for household health, safety and overall well-being. For example, more than 75 percent of households used shared or private dug wells as sources of drinking water and about 20 percent did not use latrines. There was little difference between the living conditions and household assets of members and non-members, despite members having higher yields and revenue from cocoa.

Financial capital

- **Annual revenue.** Average annual revenue from cocoa for both member and non-member households together was estimated at about USD 3160 (XOF 1.5 million) representing about 73 percent of total household revenue. Members have significantly higher annual revenues from cocoa (USD 3200) than non-members (USD 2400) as a result of relatively higher production and yields. If farmers were to live solely from cocoa, each member of an average household, specified as 7.86 dependents in the following summary on “Human capital,” would be below the World Bank’s extreme poverty line of USD 1.25 per day, especially if the costs of production were deducted.
- **Sources of income.** Other food and tree crops were cited as the most important sources of income other than cocoa by 57.44 percent of member and 22.49 percent of non-member households. Paid labour was not commonly mentioned as an alternative source of income.
- **Satisfaction with prices.** While 97 percent of members and 89 percent of non-members said they had never been paid below the set prices for cocoa authorized by the CCC, 40 percent of both declared they were either dissatisfied or very dissatisfied with the prices received.
- **Access to financial services.** Access to loans in cash was generally low. About 84.5 percent of the respondents (members and non-members) had never received loans from cooperatives in the form of cash. A few (5 percent of members and 4 percent of non-members) had received loans in the form of inputs. Since cooperatives buy and sell cocoa, they may also give loans to non-members in order to secure supply from them. Amounts received as loans varied from USD 20 to USD 100. Average interest rates were from 0 to 4 percent per month, depending on the source.

Human capital

- **Household composition.** Average household sizes for members and non-members were respectively 7.86 (+/- 3.75) and 6.41(+/- 3.71). In these households, 51.3 percent were female. In the total sample of members and non-members, about 60 percent were less than 20 years of age and only 1.4 percent were more than 60 years old.
- **Education.** About half of household members had never been to school (including adults, youths and children)—cooperative member households, 49 percent; non-member households, 51 percent.
- **Access to training.** Relatively few cooperative members (less than 10 percent) had participated in any training before joining the cooperatives—the highest numbers of participation were for training related to good agricultural practices and farm management, with 6.7 percent each. After joining the cooperatives, members saw a significant increase in access to

training, with the most common topics being group dynamics (63.8 percent), good agricultural practices (63.3 percent) and farm management (62.2 percent).

- Household labour.** Considering all age categories of household members, 30 percent worked either occasionally or year-round on the cocoa farm. Generally, men were more involved in land preparation, planting and application of inputs than were women. In the study, women's overall participation in cocoa production was lower than men's. Hired labour was used in land preparation, planting and harvesting. Except for harvesting and input application, members used significantly more hired labour than non-members and also spent more money on hired labour in all aspects of farm activities than non-members.

Social capital

- Knowledge of Fairtrade principles and practices.** A very high proportion of both members (77.7 percent) and non-members (89.2 percent) had limited knowledge of Fairtrade. Only about 9.5 percent of members and one percent of non-members had a good knowledge of Fairtrade. Furthermore, even though 61 percent claimed to know what the Fairtrade Premium was, only a few could provide an adequate explanation of it. The same percentage of respondents (61 percent) claimed to be unaware of projects that are funded by the Fairtrade Premium and 48.2 percent stated that they did not contribute to decision making about how the Fairtrade Premium was used. Nevertheless, 79 percent were either satisfied or very satisfied with the amounts of Fairtrade Premium received.
- Trust levels.** Only 33 percent of cooperative members openly declared that they trust or highly trust Fairtrade. Interestingly, there seemed to be no relationship between the level of trust in Fairtrade manifested by members and the amount the cooperatives had received in Fairtrade Premiums. In contrast, very high numbers were found for trust in cooperative leaders (87 percent), government extension staff (78 percent) and other community members (75 percent).

Taking stock

Findings from the context assessment show some favourable signs for the current and future operating

environment of the case-study cooperatives. These include the government's renewed emphasis on the cocoa sector through efforts to reform, regulate and restructure the production and marketing of cocoa. Government support both for cooperative structures and certification bodies as a means for achieving improved sustainability in cocoa is particularly positive. Also, several governmental and non-governmental bodies are providing capacity-building and extension services to cooperatives and their members with the aim of building a more sustainable sector.

Concurrently, many major global chocolate manufacturers have made a commitment to source 100 percent of their cocoa under sustainability standards by 2020. While this means that cooperatives will have to take on the challenge of meeting standards' requirements, it also opens up opportunities for more sustainable production and diversified revenue streams from different premiums.

However, issues of quality in cocoa production still exist, as do general productivity issues. A lack of capital and capacity at both cooperative and farm levels create barriers to addressing some of these issues. In addition, much still needs to be done to structure and render active the more than 2500 inactive cooperatives in the country.

Despite their young age, the cooperatives have been able to build strong relationships with a number of stakeholders, including governmental and non-governmental agencies as well as buyers and exporters. This has given them access to capacity-building and financial services and markets for their cocoa. For the most part, these relationships are positive, but cooperatives could be more empowered to negotiate their terms of trade with buyers.

The cooperatives in this study have seen a rapid increase in membership and thus increased volumes of cocoa sold and increased revenues. With these revenues, they have been able to buy a number of assets for the purchase, storage and quality assessment of cocoa. They have also used revenues to deliver member services and community development projects. While this is positive, poor record-keeping and business administration make it hard to track use of funds and assess what proportion of the margins actually trickle down to the members, raising risks for financial mismanagement and poor accountability to members.

Data at the household level show that about half of the cocoa farms in the sample are in the prime stage for production. However, there are limited ongoing initiatives to implement agricultural practices that would improve

productivity, including replanting, pruning and application of inputs. This is despite the fact that more than 60 percent of household members interviewed had been trained on good agricultural practices.

Members of cooperatives have significantly higher production and yields in cocoa than non-members. However, calculations show that even with these higher revenues, member households do not earn enough from cocoa to push them above the USD 1.25 poverty line. Basic household assets for well-being were assessed and found to be insufficient, similar to non-members, despite differences in revenue.



1

BACKGROUND

The value of cocoa beans sold around the world in the 2011/2012 production year reached USD 10 billion (Candy industry 2014), while the retail value of global chocolate sales was estimated at USD 107 billion. Cocoa production forms a critical part of the livelihood strategies of approximately five million smallholders in the tropical regions of Southeast Asia, West Africa and Latin America. Cocoa production takes place in some of the most biologically diverse regions on the planet, including Brazil, Peru, Ghana, Côte d'Ivoire, Cameroon and Indonesia. While the initial planting of cocoa results in deforestation, in comparison with other land uses that replace intact forest, cocoa agroforests with diverse and structurally complex shade canopies are among the agricultural land uses most likely to conserve a significant portion of the original forest biodiversity. However, the industry faces a number of challenges that have limited its growth, attracted the ire of socially and environmentally conscious consumers, and limited the potential benefits obtained by poor farmers engaged in cocoa production. These include the use of child labour in cocoa production; the destruction of large tracts of intact forest for cocoa production and pronounced boom-bust cycles causing devastating impacts on producers during extended downturns. Other challenges include the chronic poverty experienced by smallholder cocoa producers and labourers and the inability to increase cocoa productivity levels in major producing countries in the face of growing demand for cocoa, especially in emerging markets. While global average yield of coffee has nearly doubled between 1970 and 2010 (from roughly 400 kg ha⁻¹ to roughly 800 kg ha⁻¹), the global average yield of cocoa has remained steady at 375 kg ha⁻¹ to 450 kg ha⁻¹.

Certification systems are expected to address some of the challenges faced by the global cocoa industry. Various third-party voluntary standards systems have emerged in global cocoa markets in recent years. The most common systems are UTZ Certified, Rainforest Alliance, Organic and Fairtrade. Eco-friendly certification systems, such as

organic certification, have been advocated for conserving forests and avoiding the replacement of diverse agroforests by less diverse land-use systems. UTZ Certified and Rainforest Alliance systems place a strong emphasis on encouraging farmers to adopt good production practices, which is expected to increase productivity and improve working conditions for farmers and labourers. Fairtrade provides a framework for buyers and producers to engage in commercial relations, leading to reduced risk for farmers and cooperatives, stronger cooperatives and producer associations, and potentially higher incomes for farmers, in addition to setting standards on labour practices and the environment among other potential benefits. While certified cocoa makes up a relatively small percentage of the total cocoa market, the certified segment of the market is growing rapidly. Based on the *State of Sustainability Initiatives Review* (2014), 39 percent of the cocoa beans produced in Côte d'Ivoire in 2012 were certified by UTZ (20 percent), Rainforest Alliance (17 percent), Fairtrade (3 percent) and Organic (one percent).

After coffee and tea, cocoa is the most important Fairtrade-certified product in terms of number of producers engaged—179 000 in 2014 (Fairtrade 2015). West Africa provides roughly 75 percent of the Fairtrade cocoa sold in global markets, followed by Latin America, with the remaining 25 percent. In 2013, the year the baseline was commissioned, the volume of Fairtrade cocoa from West Africa reached 133 400 tonnes, involving 71 cooperatives and producer associations and 138 800 farmers (Fairtrade International/Fairtrade Africa 2013). Most of this cocoa is from Côte d'Ivoire and Ghana. The Fairtrade cocoa sector in Côte d'Ivoire has expanded rapidly in recent years⁴ and faces many of the same challenges as the West African

⁴ According to data from Fairtrade International, from 2009 to 2014, sales of Fairtrade cocoa from Côte d'Ivoire increased exponentially, from 3500 to 21 500 tonnes. The number of Fairtrade cooperatives in Côte d'Ivoire also increased during the period, from only 12 in 2009 to 43 in 2014.

cocoa sector as a whole. These include low productivity, poverty in farming communities, limited infrastructure, aging farming populations and limited access to basic services. In addition, there are few examples of strong cocoa cooperatives in the region—cooperatives that could play a strong role in supporting cocoa production and negotiating better terms with buyers, government agencies and NGOs. In this context, important questions arise, such as: Under what conditions does participation in Fairtrade certification in cocoa lead to significant changes for small businesses and poor farmers? How can Fairtrade and partners best help address the bottlenecks faced by the different players?

Despite the growing importance of certified cocoa, little is known about the impacts of voluntary standard systems on farmers, rural communities or the cooperatives and other types of enterprises that link farmers to international buyers and processors. A deeper understanding of the impacts of standards systems is important for the systems themselves, in order to better support farmers and businesses through better standards and better services. Information on the impact of certification schemes is also useful for the governments, private donors and NGOs that have directed resources to programmes that link smallholders to certified products. Understanding the implications of certification on farmers and local businesses is a complex process, given the large number of factors that influence outcomes and the challenges of data collection from farmers and rural businesses. Where NGOs and government agencies have worked with farmers and cooperatives, they have often paid limited attention to understanding the outcomes and impacts of their interventions.

Historically, the lack of baseline data has been a key challenge for standards systems and others in being able to rigorously assess the impacts of certification and value-chain development on producers and their cooperatives. Many of the assessments that have focused on the standards systems (for example, Fairtrade and organic) have relied on recall methods to identify changes and establish causal linkages. The collection of baseline data is essential for ensuring that the process of comparison between the current and subsequent data collected is robust.

1.1 Laying a foundation for assessing the impact of Fairtrade cocoa in Côte d'Ivoire

In 2013, Fairtrade International, Fairtrade Africa (FTA), the World Agroforestry Centre (ICRAF) and Bioversity International (Bioversity) initiated discussions regarding the generation of a multidimensional baseline on small-scale cocoa farmers and their cooperatives in West Africa.

The rapid growth in the number of cocoa-producing organizations joining the Fairtrade system in Ghana and Côte d'Ivoire provided a unique opportunity to build a baseline on Fairtrade cocoa producers in West Africa for future monitoring and impact assessment. ICRAF and Bioversity share a long-term commitment to support smallholder cocoa farmers and their cooperatives and have collaborated extensively to help development agencies and value chain actors understand the outcomes and impacts of value chain development on rural poverty. Between August 2014 and February 2015, Fairtrade International and Fairtrade Africa extended three contracts for building the baseline to ICRAF, which in turn contracted Bioversity. The initial contract provided funds for building a database in Ghana with three cooperative unions and in Côte d'Ivoire with three cooperatives and from 50 to 60 households per country. The second contract allowed for expansion of the baseline to include the six cooperatives (three per country) and 300 households per country. The third contract allowed ICRAF and Bioversity to expand the database further by including a broad sample of cooperatives (one in Ghana and two in Côte d'Ivoire) and farmers that have benefited from sales via the Fairtrade Sourcing Programs (FSP), thereby taking the total sample to 400 in Ghana for and 500 in Côte d'Ivoire. In total therefore, four cooperative unions and 400 households in Ghana, and five cooperatives and 500 households in Côte d'Ivoire were involved in the data collection.

This report describes how the multidimensional baseline was designed and carried out and presents three major dimensions of the baseline: the context assessment, cooperative assessment and household assessment. The raw data for the household dimension are in an MS Access database that will be presented to Fairtrade International and FTA along with this report. The next section provides details on the methodology used for building the three dimensions of the baseline (context, cooperative and household). A full list of indicators for each dimension is provided in this section. Section 3 provides the assessment of the context in which certified cocoa is produced and marketed in Côte d'Ivoire, while Section 4 discusses the Fairtrade cooperatives. Section 5 presents summary information on the sampled cocoa farmers in Côte d'Ivoire. At the end of each section, a summary is included to help the reader identify the main points of the analysis and provide suggestions for future work on monitoring and assessment. Given the growing presence of West African cooperatives and producers in certified cocoa markets, this baseline provides a robust benchmark by which to monitor progress and evaluate the impacts of Fairtrade certification for cooperatives and their members.

2

CONCEPTUAL FRAMEWORK AND METHODOLOGY

This section begins with a brief discussion on the conceptual framework that underpins the design of the baseline. This is followed by a detailed discussion of sample design at the cooperative and household levels, and the data collection tools and techniques applied.

2.1 Conceptual framework

The conceptual framework applied in the design of the baseline combined elements of the 5Capitals tool (Donovan and Stoian 2012) for assessing the poverty impact of value-chain development and Fairtrade's theory of change, which lays out how interventions contribute to changes at the farmer and producer organizations. It also provides a suggested set of indicators for measuring the results of Fairtrade and progress towards Fairtrade's goals.

5Capitals employs the sustainable livelihoods framework, with a particular focus on asset endowments held by smallholders, to understand the outcomes and impacts of value-chain development. 5Capitals recognizes that smallholders in agrifood value chains, including those for certified products, maintain diversified smallholder livelihood strategies based on a combination of on farm and off-farm activities, with farming—whether on one's own land or someone else's—being one among several livelihood activities. The struggle to make a living often involves temporary or more-permanent forms of migration, where remittances may be critical for productive investments and household consumption. Smallholders may have a surplus to sell in the market for only certain crops and not necessarily every year. Employment and income shift accordingly and smallholder priorities may not always be in line with the investment of capital and labour needed to upgrade their participation in a given value chain. Smallholders optimize their diversified livelihood systems

rather than any particular subsystem, such as production and commercialization of cash crops related to a specific value chain.

Against this backdrop, a focus on assets (human, social, natural, physical and financial capitals) offers a broader understanding of smallholder livelihood realities and needs. An asset-based approach sheds light on the access to and quality of the assets as well as the dynamics of asset building or erosion. It is the endowment with and wise use of such assets that permits smallholder households to respond to shocks, adverse trends and seasonality and to take advantage of new market opportunities and institutional constellations. 5Capitals provides a structure for understanding the context in which smallholders are able to develop a sound and resilient business and strengthen their livelihoods as a result of their linkage to the Fairtrade system. 5Capitals has been applied in various countries and across various value chains (Garming et al 2011; Katerberg, Khan and Ruddick 2011; Donovan and Poole 2014; Sheck, Donovan and Stoian 2013).

Figure 1 presents a stylized impact pathway for understanding the outcomes and impacts of value-chain development efforts. Outcomes (reflected in terms of changes in different types of asset endowments) and impacts (reflected in terms of advances in larger development goals such as gender equity, livelihood security) are considered at two levels: the smallholder level and the local enterprise level. Local enterprises are small and medium enterprises, which may include a cooperative, producer association or some other type of producer organization, that repeatedly engage with smallholders on a commercial basis. The focus on local enterprises recognizes the sometimes critical role that they play in linking to higher-value markets and helping smallholders build their

asset base through the provision of services (e.g. technical assistance and credit). In the context of the Fairtrade cocoa baseline, the framework points to the following considerations:

- Interventions could include access to Fairtrade certification, support by local NGOs to help build cooperatives and support cocoa-producing households, among others;
- Data collection should be carried out at two levels: Fairtrade cocoa-producing households and recently certified Fairtrade cocoa cooperatives;
- Considerable attention should be given to understanding the context for cocoa production and marketing, both the local context for production and the national and international context.

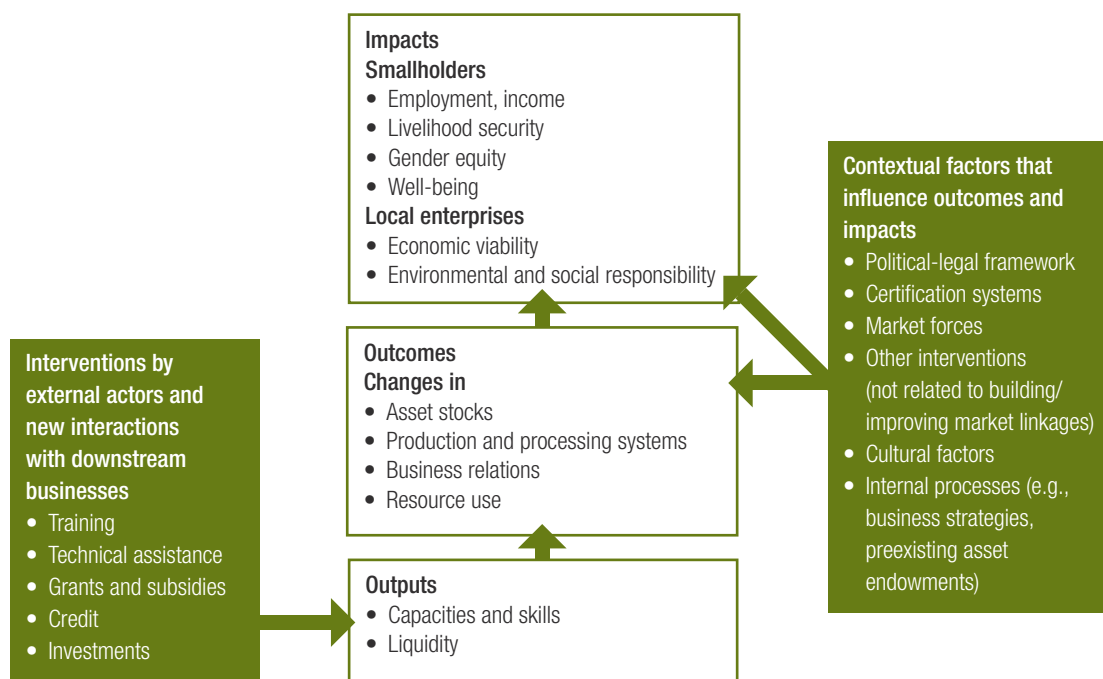


FIGURE 1. IMPACT PATHWAY THAT UNDERPINS THE DESIGN OF 5CAPITALS

The Fairtrade theory of change provides an important complement to the 5Capitals framework. Both frameworks consider interventions in the broader sense (beyond the actions of a single organization), to include the setting of standards and the interventions to help strengthen farmers and local enterprises engaged in Fairtrade. In addition, both frameworks are interested in outcomes at the level of local enterprises (or producer organizations as indicated in the Fairtrade theory of change) and producing households. The Fairtrade theory of change adds some dimensions that are especially important in the context of Fairtrade interventions and related outputs. These include:

- a strong focus on the community-level implications of the Fairtrade system (e.g. improved services and infrastructure in communities and support for their vulnerable and marginalized groups—a potential outcome of the use of the Fairtrade Premium);
- a strong focus on human rights, especially the rights of children

The Fairtrade theory of change identifies various indicators for measuring the impact of the Fairtrade system. The specific indicators that were applied in the design of the baseline (derived from both 5Capitals and the Fairtrade theory of change) are described in subsequent sections of the report.

2.2 Methodology

2.2.1 Country selection

Côte d'Ivoire was selected for inclusion in the baseline because of its significant share in the world cocoa market and because it is a major player in the global Fairtrade cocoa market. It is among the four West African countries that produce more than 70 percent of the world's cocoa,

with the other countries being Ghana, Nigeria and Cameroon. The cocoa sector has formed the economic backbone of Côte d'Ivoire for many decades. The country produces about 1.4 million tonnes of cocoa a year, about 40 percent of the world's cocoa. Some 900 000 farmers grow cocoa in Côte d'Ivoire and 3.5 million of the country's 22 million inhabitants live directly from the crop. Although cocoa production accounts for approximately 10 percent of the GDP—while agriculture in general represents 30 percent of the GDP (World Factbook, 2012)—it generated 37 percent of the national export earnings, in 2015 (UNCTAD 2016).

Côte d'Ivoire is one of the major producers of certified Fairtrade cocoa. In 2014, the country produced 49 percent of the 218,000 tonnes of cocoa produced as Fairtrade cocoa, followed by Ghana, with 25 percent.

In Côte d'Ivoire, as in other cocoa-producing countries, smallholders, cooperatives, buyers and other value-chain actors face serious challenges to build reliable supplies of cocoa. Among the challenges are dwindling productivity, lack of infrastructure and high poverty among cocoa farmers.

2.2.2 Context information

Internet searches and key informant interviews were conducted to gather contextual information on the cocoa sector in Côte d'Ivoire. Information of interest covered the political-legal framework, experiences with certification, supply and demand trends and efforts aimed at improving the livelihoods of cocoa-producing households or the viability of cocoa enterprises. The literature consulted included scientific publications, grey literature (e.g. survey

reports from projects) and websites of important cocoa actors in the country, especially the Coffee-Cocoa Council (CCC). Data collection related to the policy, market and institutional context aimed to shed light on the larger context in which certified cocoa was produced and traded in Côte d'Ivoire. Data collection specifically focused on the following:

- policies and regulations governing the cocoa sector (e.g. purchasing, pricing, extension, quality and grading);
- policies and regulations governing cooperatives, organizational structures of the cooperatives and relationships between government structures and cooperatives;
- general market trends for Fairtrade-certified cocoa and benefit capturing by Fairtrade-certified cocoa producers;
- government perception of certification schemes with particular attention to Fairtrade;
- provision of services for cocoa production by NGOs and buyers.

Table 1 identifies the selected stakeholders that were contacted to assess the policy and institutional environment for Fairtrade cocoa production and marketing in Côte d'Ivoire. Interviews aimed to uncover insights into how Fairtrade certification operated in the country, particular advances in recent years and bottlenecks for future growth. Insights from the interviews were incorporated into the data collection tools to be applied at the household and cooperative levels and formed an important source of information for the context assessment.

TABLE 1. KEY INFORMANTS INTERVIEWED

Category of organizations	Persons and/or organizations
Marketing boards	Regional director of CCC, Daloa
National agricultural and extension services	Director of ANADER, regional director of ANADER in Daloa and chief of zones in Vavoua
Certification schemes	Côte d'Ivoire Fairtrade officer (Fairtrade International consultants)
NGOs and ongoing cocoa projects	SOLIDARIDAD, World Cocoa Foundation, SOCODEVI
Private sector, buyers, processors	Cocoa plant project manager, Nestlé

2.2.3 Primary data collection

Primary data was collected from cooperative unions and their members and from non-members who resided in the same communities as selected members.

2.2.3.1 Cooperatives. In Côte d'Ivoire, cooperatives are divided into sections. Unlike in Ghana, where members from a given primary society originate from the same community and are members of the union through their primary societies (i.e. the primary societies are legal entities that subscribe to the union and not the individual farmers), in

Côte d'Ivoire, a number of villages may make up a section. These sections are not registered as legal entities but are merely geographic groupings to organize and ease access into communities. For this reason, cooperatives in Côte d'Ivoire are considered as first-level farmer organizations.⁵ Five cooperatives newly certified by Fairtrade were selected out of a total of about 60 Fairtrade-certified cooperatives in the country. The five selected cooperatives were Coop1 (membership = 397), Coop2 (membership = 614), Coop3 (membership = 900), Coop4 (membership = 713), Coop5 (membership = 326).⁶ Table 2 is an overview of the five selected cooperatives. At the time of data collection, the five cooperatives had these characteristics:

- a maximum of two years of experience in Fairtrade certification,
- typical agroecological conditions for cacao production
- cocoa from members bought and sold to exporters for a margin,
- one or more specific supply chains (exporters), among them Cargill, ADM, SACO and OLAM.

In addition, Coop1, Coop4 and Coop5 had benefited from sales generated by the Fairtrade Sourcing Partnership (an initiative that gives cooperatives opportunities to sell more of their cocoa on Fairtrade terms).

From each selected cooperative, two to three sections were selected for incorporation into the baseline. The final sample included 14 of the 29 sections that were affiliated with the five selected cooperatives. The choice of sections was made in consultation with cooperative leaders and farmers. The selection process aimed to maximize variation among the sections in terms of size (number of members and volume of production) and distance from the district headquarters and main road. The roads were classified for the purpose of the baseline sample to be either "in fair condition" (i.e. paved roads with year-round access without 4x4 vehicle) or "passible but with difficulty" (unpaved roads that required a 4x4 vehicle during the rainy season).

TABLE 2. OVERVIEW OF SAMPLED COOPERATIVES

Selected cooperative	Total membership in 2014	Sections selected from each cooperative	Total membership in selected section	Households sampled from each section
Coop1 (4 sections)	397(390 men, 7 women)	village 1	139	40
		village 2	78	22
		village 3	98	28
Coop2 (4 sections)	614 (611 men, 3 women)	village 1	215	62
		village 2	106	30
Coop3 (9 sections)	900 (895 men, 5 women)	village 1	150	20
		village 2	75	19
		village 3	65	19
Coop4 (7 sections)	665 (529 men, 136 women)	village 1	106	37
		village 2	105	35
		village 3	66	25
Coop5 (5 sections)	326 (310 men, 16 women)	village 1	104	42
		village 2	73	34
		village 3	33	9
Total			1413	422

5 *First-level farmer organization: one to which farmers directly subscribe as members; this differs from a second-level farmer organization, as with cooperative unions in Ghana, where members of the unions are the first-level organizations.*

6 *All names of the cooperatives that have taken part in the study have been anonymized.*

The decision to choose different sections with different characteristics and located at different radiuses from the district headquarters was taken to limit bias of choosing only sections that are easily accessible. Despite the above precautions, some faraway sections could not be accessed. In general, the roads to the production villages were very bad and some could only be reached by tractor. For this reason, the data collection team had to replace some initially selected production villages that were not accessible by others comparatively more accessible. This did not change the study design and had limited implication on the results since villages with similar distances were selected.

The selection of the sections determined the selection of the villages. A focus group discussion was organized with cooperative leaders to select a number of villages to represent sections that were located along roads with fair and passible conditions and also represented small, medium and large cooperatives in terms of number of members and volume of production.

As discussed above, the outcomes and impacts of the Fairtrade system on rural communities forms an important element of the Fairtrade theory of change. Data at community level were collected from key informant interviews and captured:

- the state of physical infrastructure and services within the community (roads, equipment, transport, health),
- the community decision-making process,
- other NGOs supporting community development,
- investments in community infrastructure using Fairtrade Premiums,
- growth of Fairtrade membership within the community (i.e. number of individuals who joined Fairtrade cooperatives).

2.2.3.2 Member households. Member households were those linked to a section of a certified cooperative and thus were beneficiaries of Fairtrade certification. The sample of 422 member households from the five selected cooperatives (approximately 29 percent of the total population of the five selected cooperatives), with 90 households from Coop1; 92 from Coop2; 58 from Coop3; 97 from Coop4, and 85 from Coop5. From the selected sections within each cooperative, nine to 60 member households were selected for the baseline. The selection of households within each section was random from an established list of the 1413 members who made up the 14 selected sections.

2.2.3.3 Non-member households. Non-member households included those located in the same community as member households but who were not linked to a section that belongs to a Fairtrade-certified cooperative and thus did not benefit (directly) from Fairtrade certification. Non-member households were selected, in consultation with cooperative leaders, from five communities and had characteristics similar to the sampled member households. In each of the five communities, 19 to 23 non-member households were selected (for a total of 103 non-member households).

2.2.4 Indicators at the cooperative and household levels

Based on an extensive consultative process between Fairtrade and the ICRAF/Bioversity implementation team, a multidimensional and multilevel indicator set was identified for the baseline. Table 3 and table 4 present the indicators used at the cooperative and household levels, respectively. In both cases, indicators are grouped according to the type of asset and relevance to the Fairtrade theory of change. Table 5 gives an overview of the data collection approach.

2.2.5 Enumerator selection and training

Three enumerators were hired for data collection at the household level. The enumerators held a university degree and had data collection experience in the cocoa sector, based on previous work with ICRAF in Côte d'Ivoire. They were trained for one week by the ICRAF/Bioversity implementation team prior to data collection. ICRAF staff was in the field with the enumerators to provide support in the initial stages of the data collection. After this period, ICRAF staff remained in close contact with the enumerators throughout the data collection period. The enumerators spent a total of five weeks in the field.

2.2.6 Data analysis

Household-level data was entered in MS Access software version 2010. The analytical framework was based on the one developed by the same team for the study in Ghana. A list of variables was agreed upon as a basis for the analysis and report. Quantitative data were extracted from Access and exported to SPSS for descriptive statistics. Qualitative data collected using focus group discussions were assembled for reporting (presented in this report). The qualitative data were analysed by examining and providing an explanation of respondents' answers. The detailed analysis plan was agreed upon and information grouped based on the agreed list of indicators between Fairtrade International/FTA and ICRAF/Bioversity.

2.2.7 Ethical issues

At the beginning of each interview, the enumerators explained the objectives of the research to the respondents. The research team sought informed consent from all respondents and conducted interviews under conditions of privacy. For example, some cooperative managers considered their salaries as private and consequently are not reported here. For the same reasons of anonymity, the actual names of the cooperatives are not reported here.

Instead codes (Coop1 to Coop5) are used. Respondents were required to give their consent to participate in the interviews and were told they were free to withdraw whenever they wanted. The respondents at all stages of the research were informed about the possibilities to appropriate, own and eventually make use of the results of the baseline. They were promised the possibilities of eventual feedback and training, especially in future phases of the research, such as monitoring and evaluation.

TABLE 3. BASELINE INDICATORS AT THE COOPERATIVE LEVEL

Area of impact	Theory of change and/or livelihood theme	Indicators Note: the current period refers to the 2013/2014 cocoa-production year
1. Social	Organizational strengthening of small producer organizations (SPOs)/strong, resilient SPOs	1.1 Growth of Fairtrade membership within the community 1.2 Number of registered farmers disaggregated by gender, age 1.3 Assessment of relations by cooperative members 1.4 Percentage of cooperatives that carry out consultations with adults and youths (15–35) in local communities, when deciding on Fairtrade Premium use and planning Fairtrade Premium projects in the community 1.5 Other services provided to members (inputs, credit saving schemes (what, to whom, support received for providing service) 1.6 Trainings provided to members through cooperative membership, by age and gender 1.7 Nature and strength of relations with service providers (NGOs, government agencies, others)
	Access to Fairtrade conditions	1.8 Volume and value of cocoa sold by cooperative (1) under Fairtrade conditions (Fairtrade and Premium) to Fairtrade-certified buyers, (2) under Fairtrade conditions to non-Fairtrade certified buyers and (3) as non-Fairtrade, in previous calendar year 1.9 Percentage of total Fairtrade-certified cooperative production rejected by buyers for defects or poor quality, in previous calendar year (if applicable) 1.10 Average (1) gross revenue and (2) net revenue for cooperative members from sale of Fairtrade-certified products to cooperative in previous calendar year, by gender 1.11 Nature of relations with cocoa buyers such as contracts, services offered (including percentage of cocoa delivered to authorised buyers) 1.12 of relationship with cocoa buyers/assessment of relations with cocoa buyers and local buying agents 1.13 Satisfaction with the trading relationships with authorised buyers and Fairtrade importers (information exchanged, support provided, price) 1.14 Management perceptions of benefits associated with participation in Fairtrade (percent reporting each type of benefit)

Area of impact	Theory of change and/or livelihood theme	Indicators Note: the current period refers to the 2013/2014 cocoa-production year
2. Human	Enhanced knowledge and capacity among small producers and their organizations	2.1 Member participation in decision making and policy 2.2 Percentage of female (1) board members, (2) committee members and (3) participants in general assembly 2.3 Mechanisms for sharing information with members (what, how) 2.4 Updated strategic and/or business plan that guides decision making 2.5 Mechanisms for planning and assessing effectiveness of organization (what, how, who) 2.6 Child labour policy approved by general assemblies and communicated to members—needs to be measured 2.7 Training services provided to members, by funding source 2.8 Number of members receiving support services, training on environmental management, child labour, chemical use, etc.
3. Physical	Increased investment in small producers, their communities and producer organizations	3.1 Infrastructure owned or rented, such as buildings and warehouses 3.2 Infrastructure for cocoa production and marketing 3.3 Equipment owned for business administration and provision of member services
4. Financial	Increased investment in small producers, their communities and producer organizations/ resilient and viable SPOs	4.1 Services provided by cooperative to members, loans, inputs, technical guidance, etc. 4.2 Credit received from banks and other sources 4.3 Funds invested in community development, disaggregated by Fairtrade Premiums and non-Fairtrade premiums 4.4 Funds distributed to members as bonuses
	Resilient and viable SPOs/ increased profitability and reduced risks for cooperatives	4.5 Activities carried out in the chain (e.g. production/extraction only (selling fresh); postharvest processing or drying; product transformation; trade/retailing) 4.6 Income from member dues, Fairtrade bonus and sale of services to members (e.g. fertilizers, transportation, etc.)
5. Business development	Increased investment in small producers, their organizations and their communities	5.1 Investments in local education 5.2 Investments in community health and other services, disaggregated by funding source (including Fairtrade Premium) 5.3 Investments in community infrastructure for cocoa production, disaggregated by funding source (including Fairtrade Premium) 5.4 Cash disbursements to members (Fairtrade Premium) 5.5 Policy in place on child labour/community-level activities to raise awareness on child labour 5.6 Cooperatives with effective or very effective systems to ensure no use of highly hazardous substances on Fairtrade products
6. Community development	Cooperatives able to promote community development through links to Fairtrade	6.1 State of physical infrastructure and services within the community (roads, equipment, transport, health) 6.2 Community decision-making process, participation of members, by gender, age 6.3 Other NGOs participating in the communities 6.4 Relevance of Fairtrade investments in community infrastructure and services

TABLE 4. BASELINE INDICATORS AT THE HOUSEHOLD LEVEL

Area of impact	Theme in the theory of change and/or livelihood theme	Indicator Note: Current period refers to 2013/2014 cocoa-production year	
		Data collected from household survey	Data collected by focus group, key informant, secondary information
1. Natural capital	Farm practices, access to land, production practices	1.1 Land ownership and tenure arrangements, disaggregated by gender 1.2 Area under production 1.3 Area dedicated to cocoa 1.4 Average cocoa plantation age (renovations) 1.5 Cocoa production volume	<ul style="list-style-type: none"> Production practices for cocoa (pruning, on-time fertilization, replanting, shade management, sanitary harvest) Fertilizer and agrochemical application for cocoa (amount, type, factors facilitating purchase)
2. Physical capital	Machinery and equipment for onfarm production	2.1 Tools and equipment for cocoa and other on-farm activities 2.2 Perception of access to inputs: (1) sufficient for needs, (2) limited by supply restrictions and (3) limited by insufficient income	<ul style="list-style-type: none"> Shared tools and equipment (cooperative, and community levels)
	Housing and production-related equipment	2.3 Access to potable water, electricity, communications and other basic infrastructure 2.4 Transportation costs for delivery of cocoa (not assessed because farmers do not bear this cost)	
3. Financial capital	Income sources	3.1 Gross income from cocoa sales 3.2 Fairtrade prices, satisfaction with prices 3.3 Income from other sources	<ul style="list-style-type: none"> Investments in housing, on-farm production, education and other key items/services (reported under physical assets)
	Financial services	3.1 Loans—sources, use, interest rates	
4. Human capital	Household composition and access to education	4.1 Children of cooperative members attending school, disaggregated by gender and grade	
	Productive capacity	4.2 Contribution of household members to cocoa production 4.3 Contribution of seasonal and year-round hired labour to cocoa production	
	Access to health services and worker safety	4.4 Use of protective equipment for application of chemicals, disaggregated by gender	<ul style="list-style-type: none"> Availability of health services in community Perception of quality of health services
5. Social capital	Equality, cooperation and unity in households and community	5.1 Knowledge of Fairtrade, including understanding of how payments from the cooperative are calculated, by gender 5.2 Access to (satisfaction with) support services (from primary society, others) received for cocoa production, by gender	<ul style="list-style-type: none"> Trust and satisfaction levels with primary society, cooperative, buyers, by gender Understanding of decision making on Premium use, by gender
6. Resilience	Ability to withstand production and other shocks	6.1 Sales of assets, or mobilizing support 6.2 Capacity to respond to cacao pests and diseases	

TABLE 5. OVERVIEW OF DATA COLLECTION APPROACH

Level of data collection	Overview of approach employed for collection of baseline data
Cooperative/ section level	Focus group discussions were organized with the cooperative leaders, for both cooperatives and sections. Each focus group discussion was made up of at least the president, secretary, treasurer, manager of the cooperative and at least one female leader, in cases where there was one. In addition, the cooperative managers were invited to the focus group discussions. Interviews and informal discussions with providers of services to the cooperative (e.g. SOCODEVI) were employed to triangulate and deepen information gathered during the focus group discussions.
Community level	Similar to the case for cooperatives, focus groups provided the major tool for data collection at the community level. At least 10 community members were invited to the focus group discussion. All participants worked in a single group because of limited human and time resources to divide the group into subgroups of men, women and youths, as was initially planned. Nevertheless, efforts were made to acquire specific information from women and youth when relevant. Cooperative managers provided translation into the local language during the focus group discussions (when needed).
Household level	Household questionnaires were tested in two communities and a first revision was made on the basis of the feedback from participants and researchers. The instruments were refined during the training of enumerators and tested again in another community, also involving the research assistants as part of their training. The second version of the questionnaires was modified to suit the context and objectives of the study. The following tools were employed for data collection from households: interview guide for focus group discussion with cooperative leaders (cooperatives and sections); interview guide for focus group discussion at the community level; questionnaires for cooperative members; questionnaires for non-members of cooperatives. The interviews were administered in the French language—an average of one hour was required to administer a questionnaire. (The original questionnaires were developed in English for Ghana and later adapted and translated into French for the case study in Côte d'Ivoire.)

3

CONTEXT ASSESSMENT

Côte d'Ivoire produces about 1.4 million tonnes of cocoa a year, which represents about 40 percent of the world's production and makes the country the number one producer in the world. Some 900 000 farmers grow cocoa in Côte d'Ivoire and 3.5 million of the country's 22 million inhabitants live directly from the crop. Although cocoa production represents approximately 10 percent of the GDP—while agriculture in general represents 30 percent of the GDP (World Factbook 2012)—it generated 37 percent of the national export earnings in 2015 (UNCTAD 2016).

3.1 Expansion of Fairtrade cocoa in Côte d'Ivoire

The Fairtrade cocoa sector in Côte d'Ivoire has expanded rapidly in recent years, surpassing Ghana as the largest producer of Fairtrade cocoa (table 6). The country faces

many of the same challenges as the West African cocoa sector as a whole. These include low productivity, poverty in farming communities, limited infrastructure, aging farming population and limited access to basic services. In addition, there are few examples of strong cooperatives in the region—cooperatives that could play a strong role in supporting cocoa production and negotiating better terms with buyers, government agencies and NGOs. In this context, important questions arise, such as: Under what conditions does participation in Fairtrade certification in cocoa lead to significant changes for small businesses and poor farmers? How can Fairtrade and partners best help address the bottlenecks faced by the different players?

TABLE 6. SALIENT FEATURES OF FAIRTRADE COCOA IN CÔTE D'IVOIRE, GHANA AND GLOBALLY (2009/2010 AND 2013/2014)

	Côte d'Ivoire		Ghana		Global	
	2009/2010	2013/2014	2009/2010	2013/2014	2009/2010	2013/2014
Fairtrade-certified producer organizations (#)	12	43	1	11	55	129
Farmers under Fairtrade certification (#)	NA	33 300	NA	96 900	126 000	179 800
Fairtrade cocoa production (t)	NA	106 200	NA	54 600	106 000	218 000
Cocoa sold under Fairtrade conditions (t)	3500	21 500	21 900	26 700	37 000	70 600
Fairtrade Premium received (€)	0.7 M (USD 0.91)	4.3 M (USD 5.59)	4.4 M (USD 5.72)	5.3 M (USD 6.89)	4.1 M (USD 5.33)	10.8 M (USD 14.04)

Sources: Fairtrade International (2011, 2014, 2015); NA = not available

3.2 Cocoa production in Côte d'Ivoire: a historical perspective

Cocoa growing began in southeast Côte d'Ivoire in the early 20th century. From the south-eastern part of the country, cocoa farming spread to the centre and southwest. When Houphouët-Boigny became the first president of Côte d'Ivoire after its independence from France in 1960, a series of measures were enacted to increase production in agriculture, especially in cocoa and coffee, to expand the economy and create revenue for the government. As a result of these policies, and as cocoa farming spread throughout the country, production increased dramatically. One of the policies included commercial, monetary and aid pacts that were quickly signed with Burkina Faso and Mali, leading to immigration of more than one million Burkinabe and half a million Malians to the southern part of the country (Grossman-Greene and Bayer 2009).

Between 1960 and 1980, annual cocoa production in Côte d'Ivoire increased from 100 000 tonnes to 370 000 tonnes. By 1978, the country had become the world's largest producer of cocoa, making up 40 per cent of the market. The boom period in the sixties and seventies was followed by a period of economic decline from 1980 to 2002. Cocoa production increased from 0.9 million tonnes to 1.2 million tonnes in 1995. Rising political tensions within the country and a 40 percent drop in world cocoa prices in 1998 threw Côte d'Ivoire's economy back to pre-1994 conditions. In 2002, the rising political turmoil and ethnic tensions hit a breaking point, sending the country into civil war. One consequence of the political turmoil was the absence of investment and policy incentives in the cocoa sector and the deterioration of infrastructure (CTA 2012). The most recent reforms of the cocoa sector in the country were mapped out in 2011 and implemented in the 2012/2013 season.

3.3 Political, legal and regulatory framework of the cocoa sector

Until the 1990s, the Government of Côte d'Ivoire had majority control of the cocoa sector through the Stabilization Fund (caisse de stabilisation) established in 1960. By 1978, Côte d'Ivoire had overtaken Ghana as the major producer of cocoa. Contrary to the Ghana COCOBOD that still exists today, the Stabilization Fund was dismantled in 1999 as part of the liberalization process promoted by the International Monetary Fund (IMF) and the World Bank. The liberalization process in Côte d'Ivoire led the government to abandon price setting, leaving the private sector to handle marketing

and producer prices, which resulted in price fluctuations in response to trends in global cocoa markets.

Within the same period, taxes increased in the cocoa sector in Côte d'Ivoire, while being reduced in Ghana. The civil war's impact on investments, infrastructure and policy incentives in the cocoa sector aggravated conditions. A combination of these factors caused a significant drop in total cocoa production in Côte d'Ivoire, which contributed to an increase in world cocoa prices. However, Ivorian producers were unable to benefit from this price increase because of the war.

Recent reforms in the cocoa sector were mapped out in 2011 and implemented in the 2012/2013 season. The reforms were a major policy priority for President Alassane Ouattara's government, the goal being to regulate a sector that had been liberalized by the World Bank and IMF 13 years earlier. The aim of the reform was to raise and guarantee minimum farm-gate prices in order to ensure sustainable livelihoods to cocoa growers and encourage them to boost output and reinvest in their aging plantations. The changes have put the state back at the heart of the sector and cocoa back on the government agenda. The reforms include the establishment of a central body for managing the cocoa sector, the Conseil Café-Cacao (CCC), with headquarters in Abidjan. The mission of the CCC is threefold: regulation, stabilization and development of the sector. This includes regulation of the price of cocoa, the marketers and the cooperatives in the sector.

Similar to the COCOBOD in Ghana, the CCC is also concerned with the productivity and quality of cocoa, and as part of its Quantity, Quality, Growth (Quantité, Qualité, Croissance - 2QC) Programme, it distributes high-yielding, early-producing varieties grown by the National Centre for Agronomic Research (CNRA).⁷ Each year, CCC also distributes pesticides to producers, free of charge. The CCC can play a very important role in the rejuvenation of old farms and improve production and quality of cocoa in Côte d'Ivoire and has a pivotal role in the future success of the cooperatives.

⁷ *The CNRA is a 'public limited company in which the Government of Côte d'Ivoire has 40 percent of the shares, while 60 percent is held by producers and agro-industries. CNRA's mission is to promote sustainable agricultural and agro-industrial production through research in the domain of agriculture, livestock and forestry, production systems, conservation and processing methods, as well as through adaptation of innovations in rural areas and the transfer of scientific results to public and private actors.*

In addition to the establishment and support of the CCC, the government has implemented a new marketing mechanism involving the forward sale of 70 to 80 percent of the next year's crop through auctions twice a day. The forward sale ends each year in August before the new crop season begins. It allows for the establishment of a minimum guaranteed price of 60 percent of the CIF to farmers. The government has also set up a reserve fund at the Central Bank of West African States (Banque Centrale des Etats de l'Afrique de l'Ouest - BCEAO) to cover risks beyond the normal operations of the price guarantee scheme in order to support the new marketing arrangements. The minimum guaranteed price makes farmers less vulnerable to the daily price fluctuations on international markets, giving them more financial stability so they can invest in their cocoa plantations again. However, it also means that cooperatives have little chance to negotiate on the price offered by cocoa buyers.

3.3.1 Cooperative development and support

Another objective of the government reforms is to strengthen the sector around credible and strong cooperatives. The Government of Côte d'Ivoire recognizes the importance of promoting farmer organizations and establishing a professional association that cuts across the entire cocoa value chain. The cooperative movement in Côte d'Ivoire started in 1997. Before then, the most common farmers' organizations in the country were informal indigenous self-help groups. At the time of data collection for this study, there were more than 3000 cocoa cooperatives in the country, out of which about 500 (~15 percent) were functional—based on personal interviews with SICODEVI and ANADER. The Ministry of Agriculture (MINADER) issues licenses to cooperatives, where after the CCC attributes a code. If a cooperative is not registered, it has no legal status. Unlike in Ghana, cocoa cooperatives in Côte d'Ivoire are fully involved in the buying and selling of cocoa, so are able to generate revenue and net profit from cocoa sales. This additional income source makes them more viable in the long term and less dependent on external funding from NGOs, governments or the premiums from certification bodies.

ANADER is a parastatal company created in 1993 to bring together different government extension efforts (animal production, perennial crops, vegetable farming, etc.). Headquartered in Abidjan, it also operates seven regional offices, further divided into zones managed by zonal heads and extension centres (Outreach Centres) headed by rural development agents (ADRs). On average, one ADR covers from seven to 10 villages and works with

250 to 300 producers. About 60 percent of ANADER's activities are targeted towards the cocoa sector, including the organization of farmer field schools—field schools using video, demonstration plots and demonstration units. As for certification, some exporting companies, such as Cargill and the Archer Daniels Midland Co. (ADM), partner with ANADER to assist cocoa cooperatives with Rainforest certification. This takes about three years and involves training on 26 themes grouped in nine modules, generally taught in farmer field schools.

The latest legislation governing cooperatives in Côte d'Ivoire is the OHADA Uniform Act (OHADA-UA) pertaining to cooperatives that were approved on December 10, 2010. The OHADA-UA defines a cooperative as “an autonomous grouping of persons voluntarily united to fulfill the common aspirations and needs of its members; needs that are defined to be economic, social or cultural”. Another important element is that a cooperative is collectively owned by its members, who manage it democratically. These, among others, conform to Fairtrade Standards for small producer organizations. One positive point from the new law, unlike those in the recent past, is that it makes an attempt to disconnect the bond between cooperatives and the state and gives the cooperatives more autonomy to operate as private enterprises.

However, the legal framework does not limit the number of shares for each member, and some analysts conclude that this may limit genuine democracy, which the act intended to promote (Hiez and Tadjudje 2012). This is characteristic of the cooperatives in Côte d'Ivoire, whereby a majority of the cooperatives are centred on a business 'magnate', usually a cocoa buyer. The business authority usually puts its resources (trucks, trailers, tractors) at the cooperative's disposal for its proper functioning. Such a member may have influence over the other members, especially in decision making, in that he may threaten to leave if his opinion is not taken or considered. In addition, the cooperative may be perceived by other members as belonging to the person who has invested the most shares and who took the initiative to form the cooperative. Generally, the control by these individuals arises because other members do not know that each member has equal voting rights.

3.3.2 Non-governmental agencies in the cocoa sector

In addition to government reforms in the cocoa sector, there are also several non-governmental bodies involved

in supporting the sector, including these that are directly engaged with the cooperatives selected for this study:

- **ICRAF** has been operating in Côte d'Ivoire since 2010 when it joined Mars Incorporated, under the "Vision for Change: Sustainable Cocoa Communities" project aimed at revitalizing the cocoa sector in Soubré and across Côte d'Ivoire. A series of activities and research are underway to develop improved cocoa varieties, secure markets and look for climate change adaptation and mitigation opportunities. By 2020, Vision for Change intends to reach 150 000 producers in Soubré through a network of 75 Mars- and partner-built cocoa-development centres supporting 1500 independent, farmer-run agricultural supply businesses.
- **World Cocoa Foundation**, through the Cocoa Livelihoods Program financed by both the members of the World Cocoa Foundation (WCF) and the Bill and Melinda Gates Foundation, targets about 200 000 farmers in Côte d'Ivoire, Cameroon, Nigeria and Ghana. The main objective of the program is to improve the economic sustainability of cocoa through good agricultural practices.
- **SOLIDARIDAD** pursues similar objectives through its cocoa program that focuses on four main axes: (1) production and quality improvement; (2) capacity building, governance and partnership; (3) cross-cutting themes including governance and diversification; and (4) participation in policy-process platforms and networks. In collaboration with GIZ, SOLIDARIDAD is developing a training package on the requirements of the three different certifications schemes to train farmers on the three different standards at the same time, thereby reducing costs. The training will be developed and adapted to suit different categories of stakeholders and intellectual capacity.
- **SOCODEVI**, a network of cooperatives, plays a vital role in strengthening the technical and organizational capacity of thousands of farmers (9000 farmers in 22 cooperatives) in the cocoa sector in Côte d'Ivoire. They work in collaboration with the WCF and Barry Callebaut, which provide financial support to the initiative. Their main contribution is to improve the organizational capacity of farmers.
- **The IDH-Sustainable Trade Initiative Cocoa Program** brings together more than 40 percent of the worldwide cocoa-processing industry and 30 percent of worldwide chocolate-manufacturing businesses. It also involves local governments and other stakeholders. Its goal is to

double or triple the productive capacity of smallholder cocoa farmers and at a higher quality to increase their incomes by using market-based certification initiatives.

- **The Cocoa Fertilizer Initiative**, launched in 2012 in Côte d'Ivoire, aims to restore soil fertility on cocoa farms. It works towards developing the agro-input markets in West Africa to make them more transparent and competitive, thus providing cocoa farmers with access to fertilizers and other farm inputs in an economically, socially and environmentally sustainable way.
- **The Cocoa Productivity and Quality Program (CPQP)** aims to help transform cocoa farming into a viable and sustainable business for smallholders through a market-driven approach. Begun in 2012, the program uses an integrated approach to deliver increased productivity, improved quality and large-scale professionalization of farmers and their organizations.

3.3.3 Exporters

The list of authorized cocoa exporters and buyers in Côte d'Ivoire is approved by the CCC at the beginning of every production season. Each buyer also has to establish a list of local buying agents, colloquially referred to as 'pisteurs', meaning 'trackers.' The list of pisteurs for each buyer needs to be approved by CCC before any buying operation. For the 2014/2015 cocoa season, a total of 425 cocoa and coffee buyers were approved by the CCC. The list of buyers can be found on the CCC website; those that the case-study cooperatives sell to (generally exporters) are reported in section 4.1.5 of this report. Some of the exporters are cooperatives that have been authorized by CCC to export cocoa and others are commercial companies. Some of the exporters buy both certified and non-certified cocoa, while others buy only conventional non-certified cocoa.

For the 2013/2014 production season, a total of 55 companies and 32 cooperatives were authorized to export cocoa from Côte d'Ivoire by the CCC. Unlike Ghana, where the state-borne COCOBOD controls all cocoa sales, cooperatives in Côte d'Ivoire may buy and export cocoa.

Some of the world's leading manufacturers source their cocoa from Côte d'Ivoire, including Mondel z; Barry Callebaut; Mars, Incorporated; Nestlé; and Cargill. Some of these leading manufacturers have initiated development projects aimed at increasing production, productivity and the livelihoods of cocoa farmers in Côte d'Ivoire. Most of the major chocolate manufacturers have pledged to source 100 percent of their cocoa by 2020 from cocoa farms that are

certified as sustainable. This means that major producing countries like Côte d'Ivoire must step up to meet the sustainability standards.

There are now seven main certification schemes in the cocoa sector, of which four operate in Côte d'Ivoire (Fairtrade, Rainforest Alliance, UTZ Certified and Organic). Out of the four, the first three are more prominent. In Côte d'Ivoire, certification started in 2005 and was promoted in cocoa-grower cooperatives by exporters.

However, in 2012, President Ouattara confirmed that the certification process could be considered as a tool to modernize the cocoa sector in the country. According to actors in the sector, the three certification bodies that operate in Côte d'Ivoire are complementary and many cooperatives have the three certificates. Fairtrade puts more emphasis on organizational aspects, UTZ Certified on good agricultural practices and Rainforest Alliance on environmental issues.

In general, the institutional environment in Côte d'Ivoire provides opportunities and challenges for the development of Fairtrade cocoa in the country and for Fairtrade to meet its goals and objectives. The following contextual factors are relevant for assessing the performance of Fairtrade in Côte d'Ivoire, as well as the capacity of smallholders and cooperative unions to participate in and benefit from Fairtrade cocoa:

- **Producer prices.** These are fixed by the government of Côte d'Ivoire through the CCC. At the time of the survey, with reference to the cocoa season 2013/2014, the minimum farm-gate price was XOF 750 (USD 1.5) per kg and the selling price XOF 830 (USD 1.7) per kg, providing a commission or margin of XOF 80 (USD 0.16) per kg. Over the same season, the average world market price was USD 3,009/mt and, thus, almost 80% higher than the price received by the cooperatives. The Fairtrade Minimum Price of USD2,000/MT applies at FOB level and therefore is not directly comparable with the minimum selling price established by the Ivorian government for cooperatives not acting as exporters. As a consequence, the principal monetary benefit of Fairtrade certification to cooperatives that do not export has largely been limited to the Fairtrade premium (USD 200/MT) as, between December 2007 and March 2017, the world market price has constantly been above the Fairtrade Minimum Price and been reflected in Ivorian government pricing at the relevant market reference price.

- **Cooperative legal framework.** The cooperative movement is actively supported by the government and is relatively new in the country. Though the country has about 3000 cooperatives, only about 15 percent are functional. Several factors give reason to hope that the cooperative movement can be improved. First is the presence of government arms such as the Ministry of Agriculture (MINADER) and ANADER. Another is the presence of SOCODEVI, a network of cooperatives that plays a vital role in strengthening the technical and organizational capacity of thousands of farmers (9000 farmers in 22 cooperatives) in the cocoa sector. It is hoped that the experience of SOCODEVI and ANADER can be capitalized on and scaled out.

However, much still needs to be done to structure and render active the more than 2500 inactive cooperatives. Further, while the OHADA-UA provides a legal framework on which to build the cooperatives movement, that framework does not limit the number of shares for each member, creating room for certain members to dominate cooperative finances and decision making and limiting the potential for genuine democracy, which is an important element for both Fairtrade certification and the survival of the cooperatives.

- **Multiple certification.** How efficient is it to have multiple certifications and to what extent do cooperatives and their members respect compliance measures of the various schemes? Efforts such as those provided by the development agencies GIZ and SOLIDARIDAD to develop a training package about the requirements of the three different certification schemes should be encouraged.

The emphasis on producer organizations provides a channel through which most agro-industries can use to get to farmers. Such an objective can be met by liaising with the multinational companies that have made commitments to source all of their purchases by 2020 from sustainable sources—certification being one tool. The main challenge here will be for Fairtrade to develop strategies to drive through its policy and win a reasonable share of the certified cocoa markets without negative consequences to farmers. In other words, how do the three existing certified bodies compete to win markets for their products without having farmers incur additional costs? The role of the government may be essential here. The goal will be to regulate the sector, making sure policies are developed for farmers

to benefit from the different certification schemes rather than the contrary.

- **Multiple actors in the cocoa sector.** The presence of a multitude of actors in the cocoa sector in Côte d'Ivoire provides opportunities and challenges for the development of Fairtrade cocoa in the country and for Fairtrade to meet its goals and objectives. Since one of the Fairtrade principles is to promote organizational

change and community development within cocoa communities, it can effectively link up with the multitude of international NGOs in Côte d'Ivoire, for example SOCODEVI and ANADER, to help organize cocoa farmers into producer organizations or restructure existing cooperatives. The latter is crucial, since so many existing cooperatives are non-functional.

Our reflection...

In general, the institutional environment for Fairtrade cocoa in Côte d'Ivoire is promising for the following reasons:

- The government has a positive perception of certifications, manifested by President Ouattara's observation of the certification process as a tool that can be used to modernize the cocoa sector in Côte d'Ivoire.
- There is a large presence of multinationals in the cocoa sector. Most of them have made multiple commitments to adopt sustainability standards, including certification, in the coming decades. The main issue will be how the three different certification schemes in the cocoa sector in Côte d'Ivoire will fare and whether they will have to cooperate or compete to meet their objectives of participating in the cocoa value chain. Fairtrade's share represents about three percent of the global production, which is comparatively low compared to 13 percent for UTZ and 10 percent for Rainforest Alliance.
- Currently, most cooperatives have more than one certification scheme as a strategy to diversify their sources of revenue from certification. The question is, how efficient is it to have multiple certifications and to what extent cooperatives and their members comply with the requirements of the various schemes?
- It is true that the current structure, functioning and management of producer organizations in the country leave much to be desired, especially as less than 15 percent of the some 3000 registered cooperatives in Côte d'Ivoire are functional. However, the support provided by SOCODEVI and ANADER gives room for existing and future farmer organizations to be properly structured. Fairtrade, with its emphasis on strong producer organizations, can benefit from the activities of these two organizations to better organize potential Fairtrade-certified cooperatives.
- The forward sales allow for the establishment of a minimum guaranteed price of 60 percent of the CIF to farmers. The minimum guaranteed price makes farmers less vulnerable to the daily price fluctuations on international markets, giving them more financial stability so they can reinvest in their cocoa plantations.
- The institutional environment in Côte d'Ivoire makes provision for cooperatives to buy, sell and export cocoa. This gives the cooperatives opportunity to generate their own revenues, which can be distributed to farmers.
- Given the pledge of principal chocolate manufacturers to source 100 percent of cocoa from sustainable sources by 2020, radical reforms will be needed to ensure that farmers meet the sustainability standards.

4

COOPERATIVE ASSESSMENT

4.1 Social capital—Fairtrade cooperatives case study

4.1.1 Cooperative membership and relations between cooperatives and members

Unlike Ghana, where cooperative unions are organized into primary societies, cooperatives in Côte d'Ivoire are structured in sections. These sections are geographically segmented to ease access or grouping of members. The numbers of sections for the case study cooperatives varied from four to 10, depending on the size of the cooperatives and the geographical spread.

For all of the cooperatives, membership has increased by at least 30 percent (table 7) from the year of official registration to the time data was collected (2014/2015). This increase has been attributed to the efforts made by cooperative management to encourage other cocoa growers in the communities to join the cooperatives. Other reasons for increased membership suggested by the leadership of the cooperatives were that some new members might have been attracted to the cooperatives when they observed that members had better production than non-members. Another reason was the low barriers to entry (payment of an entry fee of XOF 1000–5000, USD 2–10) and, lastly, the attractiveness of Fairtrade Premiums and other benefits derived from joining the cooperative.

In Coop4 and Coop5, women represented 20 percent and four percent of the total membership, respectively. In contrast, the other three cooperatives in this study each had a female membership of less than 0.1 percent.

Focus-group discussion revealed that the low participation of women in these organizations was related to most women being more interested in food crops, which was considered less strenuous than cocoa farming. This appeared to be backed up by some of the household survey findings, which showed low participation of women in land preparation and application of inputs in cocoa. However, other reasons could be that men traditionally control the marketing of cocoa, while women work more on different aspects of cocoa production. Also, since participation in the cooperative includes membership fees, there would be a low incentive for households to pay the entrance fee for both husbands and wives to become members.

It was not possible to obtain information from the cooperatives on the age distribution of their members. This is an area in which cooperatives could focus future attention. In general, members seemed happy with the service delivery of the cooperatives. The household survey found that a very high proportion of the respondents, 87 percent, trusted their leaders working in the cooperative headquarters. An almost equal proportion trusted staff members at the level of the sections. A further 95 percent of household members were either satisfied or very satisfied with the trainings delivered through the cooperative (see section 4.1.2). There were no better ways to assess the sincerity of these positive views, which may partly be rooted in a cultural aspect of not criticizing leaders even if they are viewed as bad. It could also be that those giving positive opinions lack alternative experience for comparison.

TABLE 7. MEMBERSHIP OF COOPERATIVES AS OF 2014

Cooperative	Year of official registration	Partner of the FSP initiative	# farming households (FH) at creation of cooperative	# number of sections (NS) and farming households (FH) in 2014	% female members belonging to cooperative	Year of Fairtrade certification
Coop1	2006	Yes	FH = 303	NS = 4 FH= 397	1.7	2012/2013
Coop2	2011	No	FH = 250	NS = 4 FH = 614	0.4	2013
Coop3	2008	No	FH = 250	NS = 10 FH =900	0.5	2012
Coop4	2010	Yes	FH = 350	NS = 7 FH= 625	20	2013
Coop5	2010	Yes	FH = 110	NS = 5 FH= 326	4	2013

FH = Farming households; NS = Number of sections; FSP = Fairtrade Sourcing Programs

Our reflection...

- The cooperatives have experienced rapid growth in membership since their foundation. This reflects: (1) low barriers to entry (payment of an entry fee of XOF 1000–5000, or USD 2–10), (2) attractiveness of Fairtrade Premiums and other benefits derived from joining the cooperative.
- Cooperatives have a very low percentage of female members, less than 0.1 percent for three cooperatives. While this possibly reflects the low number of female owners of cocoa plantations, it is important to increase the female base of the cooperatives since women contribute significantly to cocoa production.
- Important issues to incorporate in the monitoring program include: (1) evolution of membership in general and proportion of women in particular and (2) periodic assessment of members' perceptions of the cooperatives' capacity to meet expectations.

4.1.2. Relations with service providers

Through the support of NGOs such as SOLIDARIDAD and SOCODEVI, cooperatives have developed partnerships with a number of multinational chocolate companies. Capacity building and training was an integral component of the activities of the five cooperatives, and different partners delivered training to cooperative members and non-members (see appendix 1 for types of training). None of the cooperatives kept records of training received, trainees or trainers, and there was confusion as to which organizations delivered some of the trainings. The implication is that most of the information recorded in the table in appendix 1 was based on recall.

All five cooperatives claimed to have received trainings delivered by Fairtrade consultants, aimed at helping the cooperatives meet Fairtrade Principles and Standards. Only Coop4 and Coop5 have received extensive training from Fairtrade, beyond the basic introduction to Fairtrade Standards. It was not surprising that Coop1 and Coop2 have not received the same level of training, because they are yet to receive a Fairtrade market.

A common partner of three of the cooperatives is ANADER. Its training modules were related to good agricultural practices, application of inputs and postharvest technologies. One of the cooperatives (Coop3) has received structural and capacity-building support from SOCODEVI. Members are expected to attend all trainings except those

related to the application of inputs and phytosanitary substances and those related to management. Trainings related to the application of inputs and the manipulation of tools and equipment were only delivered to selected persons responsible for such activities in each cooperative. This measure was taken to reduce the negative effect on members' health from applying chemicals on their farm.

For some trainings, only the delegates representing each section were invited and these delegates were expected to provide feedback to other members. It is unclear to what extent delegates passed on this information to other members since records were not available. Such training approaches need to be further investigated to understand the extent to which information was transferred to other members and how inclusive this process was.

The cooperative leaders were all very satisfied with the content of the trainings. They affirmed that the trainings to comply with Fairtrade Standards have helped them acquire new skills that they now apply in the management of the cooperatives. Trainings related to participation, leadership and transparency in the management of the cooperatives were among those specifically cited by cooperative leaders to have been delivered by Fairtrade and for which they were particularly satisfied. The group leaders further claimed that the trainings helped improve group cohesion and increased the production and productivity of their farms (especially those related to good agricultural practices delivered by ANADER). Like their leaders, most household members (more than 95 percent) were either satisfied or very satisfied with the content of the trainings received (fig 2).

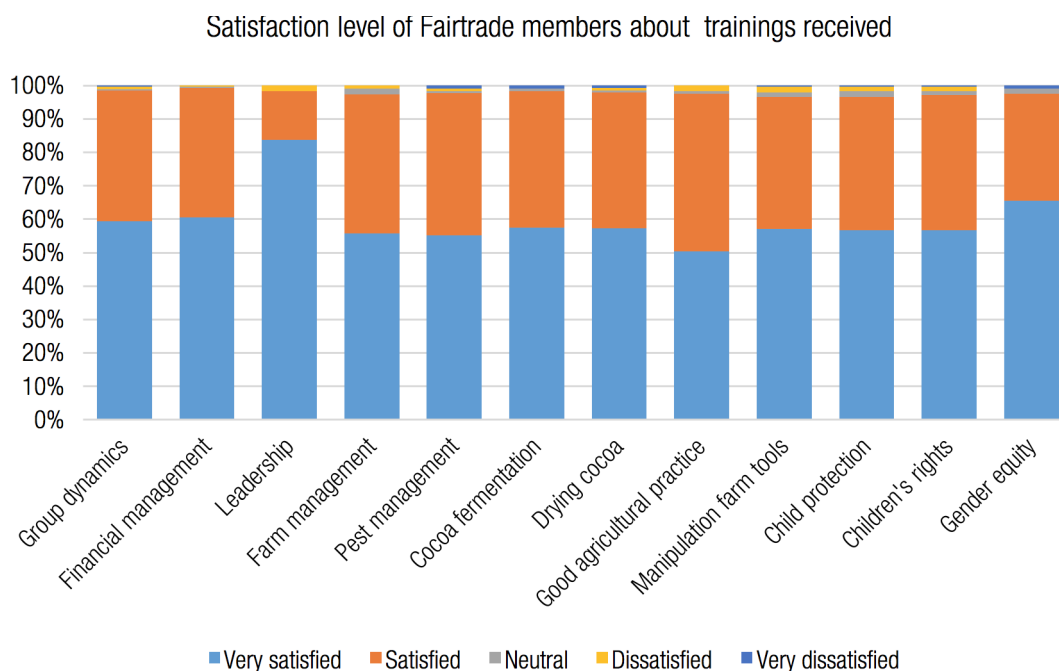


FIGURE 2. HOUSEHOLD MEMBERS' SATISFACTION WITH TRAININGS

Despite having received a number of trainings, some cooperative leaders still expressed the need for supplementary training in order to improve cooperative management and develop members' entrepreneurial skills. The solicited trainings were particularly related to alternative income sources and effective use of family income through proper budgeting. The requests for training in investment and financial management could stem from most farmers' lack of cash a few months after selling their cocoa. Additionally, lack of other sources of income was often mentioned as one of the reasons for additional training on entrepreneurship.

The cooperative leaders demonstrated a good understanding of Fairtrade and could differentiate between the requirements of different certification schemes they have used. More specifically, they could provide a reasonable definition of what Fairtrade is and described the nature of their partnership with the certification scheme. The cooperative leaders reported that they have benefited from a number of capacity-building programs aimed at improving group cohesion and individual production techniques. They felt they had also gained a spirit of community development from the Fairtrade Principles that has benefited their communities. Cooperative leaders reported that farmers

were generally satisfied with the training they received through the cooperatives. However, the two cooperatives

yet to sell their certified cocoa under Fairtrade conditions were very dissatisfied.

Our reflection...

- The lack of data on training indicates that the reporting systems of the cooperatives are very weak. Data on who received training, on what topics and under which conditions would greatly contribute to better planning of the services that cooperatives deliver to their members (as well as for negotiating training programs with external partners).
- The leaders of the cooperatives were able to identify important areas where they would like to strengthen their skills and knowledge. We consider the requests to be quite relevant because, as reported in section 4.1.2, it was difficult to collect reliable production and financial information from leaders of the sections.
- Currently the rate of satisfaction and trust among members concerning cooperatives and their service providers is high. However, as membership rises, cooperatives will need to identify ways to ensure that services continue to be delivered consistently and equally to all members. Some specialized trainings were only delivered to selected members of the cooperatives. For example, all SPO members were targeted for training on safe use of pesticides and waste management, but only those selected for spraying pesticides received extensive training and individual protection equipment. However, there were instances when training-of-trainers approaches were used for training intended for all members. In these cases efforts must be made to ensure that all members have equal access to these services.
- Strong relationships have already been built between cooperatives and several service providers. The presence of the state is felt through ANADER, which provided training services to three out of the five cooperatives. The presence of SOCODEVI, an organization that supports cooperatives through training in organizational development, provided opportunities for Fairtrade-certified cooperatives to be better organized and structured. Cooperative leaders demonstrate a good understanding of Fairtrade, and those that have accessed Fairtrade markets indicate very high satisfaction rates, especially with the support received and the Fairtrade Premium; however, there are high levels of dissatisfaction with Fairtrade at both the cooperative and member levels among those who have not yet accessed a Fairtrade market.
- These indicators are very relevant for future monitoring efforts by Fairtrade International and partners. We would also consider it important to (1) enter into dialogue with the cooperative leaders to better understand their perceived need for technical assistance, and (2) design and implement a simple mechanism to monitor the effectiveness of training efforts by external partners.

4.1.3 Volumes of cocoa traded

The quantity of cocoa sold by each cooperative for the past three years is shown in table 8. All of the five case study cooperatives are certified with at least two certification schemes. At the time the data for this study was collected, Coop2 and Coop3 had not succeeded in finding a Fairtrade buyer. The three remaining cooperatives had all benefited from sales via the Fairtrade Sourcing Programs and had Fairtrade markets. One of the cooperatives mentioned had a relationship with Fair Trade USA and claimed the latter is different from conventional Fairtrade discussed in this report. It is thus important that efforts are made to explain the

differentiation between existing certification schemes, e.g. Fairtrade International and Fair Trade USA.

The volume of cocoa sold by each cooperative increased over the three-year period for which data was collected. Cooperative leaders argued that the increase in production resulted from two factors: (1) the significant increase in membership during the period and (2) the adoption of good agricultural practices (and thus increased productivity)—the latter was most stressed by the leaders and was confirmed by farmers during focus group discussions in the communities.

Similarly, the volume of cocoa sold under Fairtrade conditions also increased for those cooperatives that carried out Fairtrade transactions over the same period. All three cooperatives had been selling cocoa on Fairtrade terms since the 2013/2014 season; the percentage sold under Fairtrade terms varied from 15 percent to 100 percent. For Coop4 and Coop5, data were available for two seasons up to the 2014/2015 season (as data was collected in 2015). They had seen consistent or increased sales of Fairtrade products sold to Fairtrade buyers between the two seasons, which provides room for optimism that in these cases quantities sold on Fairtrade terms is increasing. Unfortunately, Coop2 and Coop3 at the time of data collection had been unable to sell any cocoa under Fairtrade terms for the past three seasons.

In Côte d'Ivoire, both the minimum selling price and the minimum producer price are fixed by the CCC, typically varying year by year according to the oscillations in the world market. For the 2013/2014 season, the minimum sales and

producer price were XOF 830 kg-1 (USD 1.66) and XOF 750 per Kg (USD 1.50), respectively. Fairtrade has established a floor price of USD 2000 MT to be paid to the cooperatives when the world market price falls below this level. Over the 2013/2014 season, however, the average world market price was USD 3,009/MT and, effectively, it has constantly been above this threshold between December 2007 and March 2017. The large gap between the world market price (FOB) and the prices paid to cooperatives and producers is largely due to costs related to inspections, buyer's margins, loading, transport, quality control, storage, export permits and taxes. These transaction costs are typically deducted from the world market price, exposing the cooperatives and producers to risks in terms of fluctuations in both the world market price and the transaction costs. The Fairtrade floor price at least helps buffer against major drops of the world market price, also when cooperatives are not exporters. Even in times when the floor price is not effective, cooperatives receive the Fairtrade Premium of USD 200 for any ton sold under Fairtrade terms.

TABLE 8. QUANTITY OF COCOA SOLD THROUGH DIFFERENT CHANNELS

Cooperative	Cocoa season	Total (t)	Volume sold through conventional channels (t)	Volume sold through certified channels in tonnes (%)	
				Fairtrade International	Others (UTZ, Rainforest, Fair Trade USA)
Coop1	2013/2014	1805	1525	280 (15%)	0
	2012/2013	1111	976	0	135
	2011/2012	860	860	0	0
Coop2	2013/2014	2000	1252	0	748
	2012/2013	1649	1257	0	392
	2011/2012	117	117	0	0
Coop3	2013/2014	1629	546	0	1083
	2012/2013	1354	575	0	779
	2011/2012	774	518	0	256
Coop4	2014/2015	1595	323	635 (39.8 %)	637
	2013/2014	1318	310	321 (24.4%)	686
	2012/2013	1188	186	0	1002
Coop5	2014/2015	152	0	152 (100%)	0
	2013/2014	124	0	124 (100%)	0
	2012/2013	110	110	0	0

The cooperative leaders all reported that some members practiced side selling and estimated the proportion to be between five and 20 percent. Various reasons were given to explain members' side-selling decisions, among which was their desire to meet urgent financial needs and strategies to avoid paying loans contracted through the cooperative.

4.1.4 Quality of cocoa traded

The CCC defines three grades of cocoa for Côte d'Ivoire: grade 1, grade 2 and off-grade. Only grade 1 and 2 are exported and off-grade is used for internal processing. All cooperative leaders claimed that they master the above quality standards and declared that their production is usually between grades 1 and 2. Two of the cooperatives had encountered problems related to quality (table 9), mostly problems of high humidity of the cocoa beans and presence of foreign bodies among them. The table also shows that cooperatives rejected only small quantities from members. Three of the cooperatives had incurred some rejection by a buyer.

However, the managers of the cooperatives considered the percentage of rejection to be small. Other than the cases of quality imperfections, none of the cooperatives reported receiving negative feedback on the quality supplied. Coop3 attested that they had once received bonuses of XOF 3 million (USD 6000) from one of the buying companies for producing high-quality cocoa. The cooperatives said that they believe they produce good quality cocoa because the rate of rejection, except for the cases reported in table 9, were very low. All the cooperative leaders mentioned that they carry out continuous quality-awareness campaigns to encourage members to adopt good agricultural practices and postharvest handling, which helps ensure the quality of cocoa they produce.

However, the installation of drying infrastructure in Côte d'Ivoire by exporters is a clear indication that quality is still an issue at the farmer level, thus this needs to be addressed to avoid inappropriate fermentation.

TABLE 9. QUALITY PROBLEMS ENCOUNTERED BY CASE-STUDY COOPERATIVES IN CÔTE D'IVOIRE

Cooperatives	Production season	Quantity of member production rejected by cooperative for quality reasons	Reason	Quantity of cooperative production rejected by buyers	Reasons for rejection
Coop1	2013/2014	10 bags	High humidity and presence of foreign bodies	38 tonnes	Cooperative leadership believed it was an analysis error because the same volume was taken for further analysis and later bought by another buyer
Coop2	2013/2014	Zero	None	375 kg	High humidity (> 8%)
Coop3	2013/2014	Zero	None	Zero	None
Coop4	2014/2015	4% of total production	High humidity and presence of foreign bodies	2%	Presence of pods; unseparated pods
Coop5	2014/2015	0%	0%	0%	Not applicable

Our reflection...

- A positive finding is that the volume of cocoa sold by each cooperative increased over the three-year period for which data were collected, increasing revenues for cooperatives. For three cooperatives, the volumes sold to a Fairtrade buyer increased, enhancing their access to their Fairtrade Premium and further raising their revenues.
- However, two cooperatives have still been unable to sell their Fairtrade product to a Fairtrade buyer. These cooperatives are very dissatisfied with the Fairtrade scheme and are threatening to leave it if they cannot access a market. Although Fairtrade certification does not guarantee a market (as a voluntary scheme), Fairtrade could further assist cooperatives in identifying a market and in making market access more equitable between different certified cooperatives.
- Side selling is common in some of the cooperatives. Most side selling occurs as members struggle to evade reimbursing loans contracted through the cooperatives and to meet urgent financial needs. Efforts should be made to identify ways to address these issues to ensure that as much of the members' cocoa as possible is sold to the cooperatives.
- Issues of quality are not perceived to be a major concern by the managers of the cooperatives, although three out of the five cooperatives had encountered cases of loss due to low quality. The cooperatives regularly implement activities to sensitize members on quality issues.

4.1.5 Trading relations

All five cooperatives claimed to have written contracts with cocoa buyers (table 10). In concrete terms, the cooperatives referred to weekly advance payments they received from their buyers. The weekly advances were given by exporters to the cooperatives to enable them to purchase cocoa from farmers and supply to them. The amount received was usually XOF 70–90 million (USD 140 000–USD 180 000) and was determined by the volume the cooperative expected to deliver over a given period, usually a week. In addition to advance payments, some cooperatives had received other financial services from the buying companies. Coop1, for example, received a loan of XOF 7 million (USD 14 000) from CNEK to repair its vehicles. A cooperative union stood as guarantor to Coop1 for loans received from Shared Interest as part of a project facilitated by Fairtrade Africa in partnership with Shared Interest.

The cooperative leaders were generally not satisfied with their trading relationships with accredited buyers, claiming that the buyers did not always provide the services they request from them. For example, the weekly purchase loans often were not granted on time and when they came, the amount was usually smaller than the amount requested. The cooperative leaders, however, appreciated that their buyers provided loans to them without guarantees and interest. For their part, the buyers were not satisfied with cooperative leaders because they claimed that the cooperatives often did not deliver on the agreements, especially regarding quantities supplied.

As with Ghana, there is little room for negotiation on prices set for cocoa between the cooperative and the buyer since the minimum farm-gate price for cocoa is set by the Government in Côte d'Ivoire.

TABLE 10. LIST OF BUYERS DEALING WITH RESPECTIVE COOPERATIVES

Cooperative	Buyer	Category of buyer	Type of cocoa bought	Type of contract	Services offered by buyer
Coop1	ADM	Commercial Company	Fairtrade certified UTZ certified/ Conventional	Written contract specifying quantity of Fairtrade and UTZ certified cocoa	Weekly/Trip purchase loans
	ECOKIM	Cooperative	Conventional	Weekly purchase agreement, specifying loan and quantity to deliver	Back-up loans received from Shared Interest
	CENEK (a cooperative)	Cooperative	Conventional	Written agreement	Loan to repair vehicles in 2013 XOF 7 million (USD 14000), no interest
Coop2	ADM ⁸	Multinational	UTZ certified	Weekly purchase agreement, specifying loan and quantity to deliver	Loan in 2013
	Outspan ⁹	Multinational	Conventional	Weekly purchase agreement, specifying loan and quantity to deliver	Weekly/trip advance payments XOF 70 million, (USD 140 000), no interest
Coop3	Barry Callebaut	Multinational	Conventional	Weekly purchase agreement, specifying loan and quantity to deliver	Weekly/trip advance payments XOF 90 million (USD 180 000)
	ZAMACOM	Multinational	Rainforest Alliance certified	Four-year contract for RA certified cocoa; contracts specify the quantity of cocoa to be bought each year as RA	None
Coop4	ADM	Commercial Company	Fairtrade certified, UTZ certified and Rainforest Alliance certified	Written contract: specifying quantity, quality	Facilitate access to development projects—mosquito nets, medicines, etc.—that may not necessarily be related to Fairtrade Premium; provide purchase loans, access to health facilities
	SACO	Commercial company	Conventional	None	
Coop5	ECOOKIM (exclusive buyer)	Cooperative	Fairtrade certified, UTZ and conventional	Written contract	Advance payments

8 ADM has been taken over by OLAM. Follow link referring to the official takeover statement (<http://49tmko49h46b4e0czy3rlqaye1b.wpengine.netdna-cdn.com/wp-content/uploads/2014/12/Press-Release-16-December-2014.pdf>)

9 Outspan falls under OLAM.

Summary: social capital—cooperatives

Table 11 presents an overall assessment of the status of social capital of the cooperatives, the justification of the assessment, and insights for the monitoring program and interactions with stakeholders.

TABLE 11. SUMMARY: SOCIAL CAPITAL ENDOWMENTS (COOPERATIVES)

Indicator	General assessment of current situation*	Justification for assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
1.1, 1.2, 1.3: Registered farmers and membership growth in sections	Green	All of the cooperatives have witnessed growth in individual membership; There is also a high satisfaction with trainings delivered by the cooperatives and high trust levels among cooperative members.	<ul style="list-style-type: none"> Current record-keeping on membership limited to name and gender: for future monitoring, introduction by cooperatives of administrative systems that also track age and other aspects of cooperative membership. Explore further factors that might be contributing to growth in membership.
1.5, 1.6, 1.7: Other services provided to members; trainings provided to members through coops; nature and strength of relationship with service providers	Yellow	<p>All five cooperatives have partners that provide services, particularly access to capacity-building trainings.</p> <p>However, some of this training is only delivered to cooperative management with the expectation that it will be transferred to other members. Further reviews are needed to address to what degree such approaches are inclusive of all members and to what degree this acquired knowledge trickles down to all cooperative members equally.</p> <p>They also have access to some services from their buyers—specifically purchase loans—and have sales contracts with their buyers but amount of loans received was insufficient.</p>	<ul style="list-style-type: none"> Better record of provision of services delivered through cooperatives needed, including type of training delivered and to whom. Also, need to understand in more depth the impact of training-of-trainer approaches vs. direct training to members Urgent need to better understand the financial needs of cooperatives and develop loan schemes similar to that between Shared Interest and ECOOKIM. Identify other possible service providers to address needs not currently covered
1.8, 1.10: Volume and value of cocoa sold to Fairtrade and other buyers	Yellow	Side selling can account for up to 20 percent of members' production and efforts should be made to reduce this by developing strategies to address reasons why members get involved in side selling.	<ul style="list-style-type: none"> Cooperatives identify ways to better monitor as well as reduce side selling among members.
1.9: % of Fairtrade cocoa of cooperatives rejected by buyers	Yellow	Two of the cooperatives report cases of rejection of cocoa deliveries due to poor quality. While rejection rates are small, it is still important for cooperatives to work more on improving the quality of cocoa produced.	<ul style="list-style-type: none"> Need to monitor how the rate of rejection reduces or increases over time.
1.11, 1.12: Relationship with cocoa buyers	Yellow	<p>All of the cooperatives have written agreements with buyers, specifically related to purchase loans.</p> <p>In all cases, buyers could hardly be considered stakeholders in the cooperative development process. Small amounts of credit appear to be the main service provided by buyers.</p> <p>There is little price negotiation with buyers. Minimum farm-gate prices are fixed by the government and are often above the Fairtrade Minimum Price.</p>	<ul style="list-style-type: none"> Identify strategies between buyers and cooperatives to both formalize and adhere to agreements; in particular. Agreements should include elements that favour growth of cooperatives, including more extensive support to cooperatives by buyers. Further monitoring on value of loans received from buyers and assessment of how sufficient this is for cooperative needs.

Indicator	General assessment of current situation*	Justification for assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
1.13: Satisfaction with trading relationships	Yellow	All five coops are generally unsatisfied with their buyers because of the size of loans. However, Coop1 is satisfied with ECOOKIM (the cooperative union) for standing as guarantor for the loans they contracted from Shared Interest.	<ul style="list-style-type: none"> As above, Fairtrade and other cooperative support organizations identify ways to build sustainable buying and selling relationships with buyers. Monitoring activities that measure number and quality of services rendered by buyers over time.
1.14: Perceptions of benefits associated with Fairtrade	Yellow	All coops that have sold their cocoa as Fairtrade and thus received Fairtrade Premium have a good understanding of Fairtrade and appear to be, on average, satisfied with benefits of joining the scheme. Coops that have not yet sold their cocoa as Fairtrade are less satisfied.	<ul style="list-style-type: none"> Assess perception of the benefits of joining Fairtrade. Identify ways to address marketing issues of the remaining two cooperatives as yet unable to access Fairtrade markets.

*Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives.

4.2 Human capital—case study Fairtrade cooperatives

4.2.1 Governance, participation and decision-making processes

As a result of the implementation of the OHADA-UA, all cooperatives in Côte d'Ivoire are expected to have the same organogram. Two types of organograms exist and the choice of any form adopted by a cooperative is at its discretion. A cooperative may thus have a simplified organogram or alternatively, may have a board of directors. The five case-study cooperatives have all opted for boards of directors. Figure 3 illustrates such an organogram. Cooperatives with a board of directors are expected to have two main management organs: the board of directors and the supervisory organ.

The board of directors consists of from five to 12 persons, who can be natural or legal persons. The board of directors is elected according to the articles of association of the cooperative, which set the duration of the directors' mandate. The supervisory committee is the control organ of the cooperative. It is made up of three or more persons who are elected by the general assembly.

In addition, a cooperative with a board of directors must appoint a statutory auditor when three conditions are cumulatively met: membership numbers at least one thousand, yearly turnover is at least XOF 5 million (USD 10 000) and the balance sheet is at least XOF 5 million (Art. 121).

According to the OHADA-UA, the general assembly (GA) is the decision-making body of the cooperative. The GA has the power to: approve financial statements, appoint and dismiss directors, appoint members of the supervisory body and amend the articles of association. All registered cooperative members are members of the GA (Art. 100). However, to properly manage numbers, each cooperative may be structured into sections and each section may decide to appoint delegates to represent the section in GA meetings. Decisions are taken by vote, and the principle of "one member, one vote" prevails, regardless of the shares. Participation in meetings is personal but members can vote by proxy. Sections may hold meetings prior to and after GA meetings—these meetings may be ordinary or extraordinary depending on the circumstance. According to the UA, there is a quorum that must be present for the GA to do business; without it, a second meeting may be called. The interviewed cooperative leaders all agreed that the existing structure gives enough opportunity for GA members to participate in decision-making processes.

The OHADA-UA provides the necessary conditions for cooperatives to be properly managed. Discussions with the cooperative leaders suggest that all the case-study cooperatives have taken the necessary dispositions to respect the provisions of the OHADA-UA. In general, each cooperative has a general assembly; a board of directors (president, vice president, advisers, secretary and vice secretary, treasurer and vice treasurer); a supervisory committee and an audit team—all of whom are elected.

Moreover, each cooperative has a directorate under the leadership of a manager, who oversees the day-to-day functioning of the cooperative. Some cooperatives may employ either permanent or temporary workers to assist the

manager. The manager, accountant/cashier, secretary and storekeeper often work full-time, while drivers and cleaners are often temporary staff.

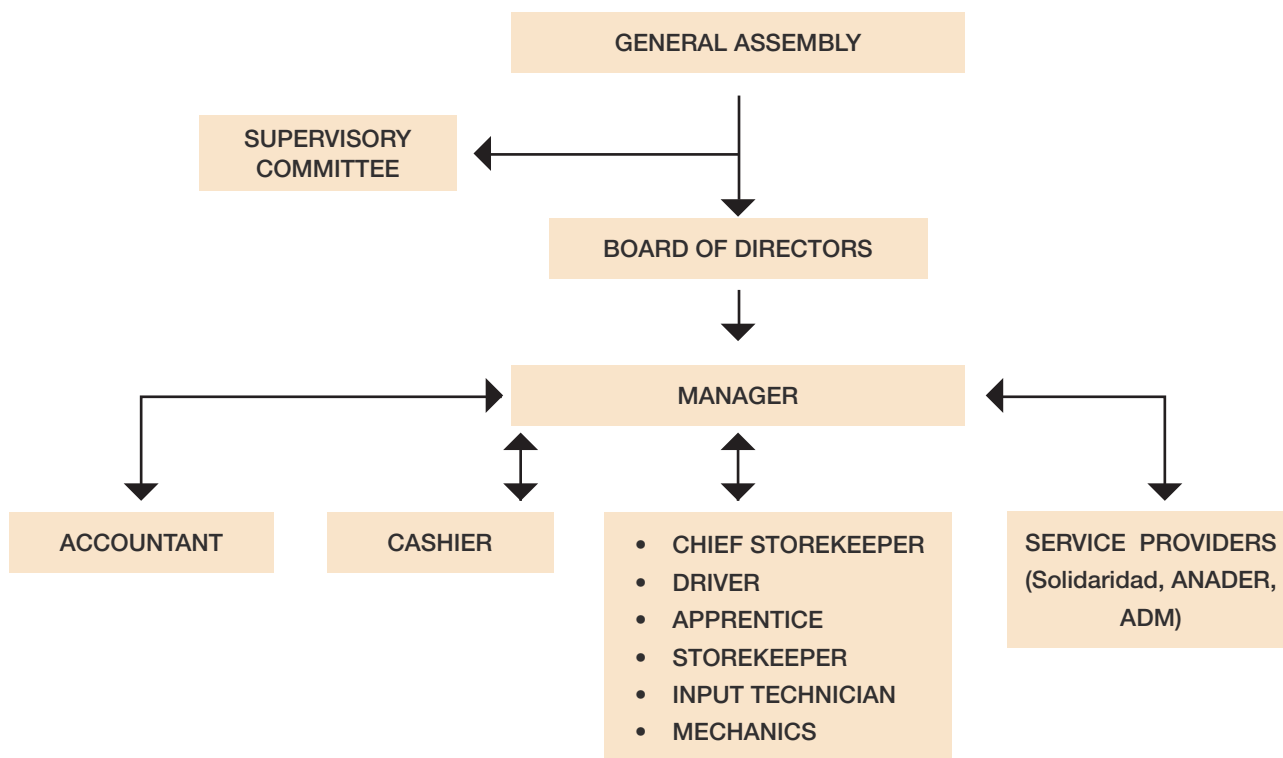


FIGURE 3. SAMPLE ORGANOGRAM OF A COOPERATIVE IN CÔTE D'IVOIRE—CASE OF COOP4

Most decisions are made in the general assembly. Decision making within the cooperative is through a one person, one vote system regardless of the shares; and in case of a tie, the president decides. This does not, however, contradict earlier discussions that business magnates with high shares may influence decisions through threats to leave. Generally, the board of directors makes proposals to the GA, which may either be approved or rejected. According to the OHADA-UA, resolutions of the GA are reported through minutes of the meetings. All of the case study cooperatives have a secretary and a book for minutes and thus make efforts to capture the resolutions of the GA. However the quality of the reports is often poor.

Depending on the circumstance, the cooperative may call for an extraordinary general assembly. The board of directors or the executive meeting may be held once a month or quarterly, depending on each cooperative. Participation in meetings is often very high; at least 80 percent. In general, all categories of members (lay members

and the board) are often excited to be part of every meeting. Absences are frequently justified by health, family or other social reasons. In some instances, ordinary members from the sections can voluntarily attend the GA meetings, especially when very important issues are to be discussed. For example, in the case of Coop3, a truck transporting cocoa from a supply village to the city was attacked; a general assembly meeting was called to discuss this issue and was crowded with ordinary members. One factor that often stops cooperative members from attending general assembly meetings is transport, because production villages are often far from cooperative headquarters. Various topics are discussed by the board, including progress made in the societies, farm management practices and the financial status of the cooperatives and the sections.

In addition to adopting strategic decisions, the GA may be used as a forum for sharing important information with members. In some cases, important resolutions were put on the notice board of the cooperative office. However, in all

likelihood, relatively few members visited the offices because they are often in small towns and difficult to access from the production villages. Some resolutions could also be found in the minutes books of either the sections or cooperatives, but such information was difficult to retrieve for most members. Even for members with access to the minutes, the poorly recorded resolutions created problems.

A key issue with the legal framework of the OHADA-UA is that it does not limit the number of shares for each member, leading some analysts to conclude that this may be a limitation to genuine democracy. For all the case study cooperatives visited, this is true: most of the cooperatives are centred on a business ‘magnate’—usually a cocoa buyer. The business authority usually puts its resources (trucks, trailers, tractors) at the cooperative’s disposal for its proper functioning. Such a member may have influence over the other members, especially in decision making. The cooperative may be perceived by other members as belonging to the person who has invested many shares and who took the initiative to form the cooperative. The decision by such business magnets to register as members in these cooperatives can be interpreted as a strategy for them to easily secure the production of other farmers who are members of the same cooperative. An open question from this scenario is the extent to which farmers actually take part in the management of their so-called cooperatives, as stipulated by the OHADA-UA.

4.2.1.1. Gender participation and management of the cooperatives. The participation of women in the case study cocoa cooperatives was generally very low—four percent (table 12). Among the five studied cooperatives, three had

no females representing a section in the GA and two had no females on their boards of directors. Nevertheless, women occupied strategic positions in some of the cooperatives. For example, one cooperative had a female board chair and another a vice chair and a secretary. The manager in one of the cooperatives was a woman. Of interest is that the two cooperatives with higher representation of women on their boards had accessed Fairtrade markets through the Fairtrade Sourcing Programs.

Like women, young people (< 35 years) were generally poorly represented in the management of the cooperatives. The sample from the household survey found the average age of cooperative members to be 45. An average older age of members could be a possible reason for low participation of youths in the boards of directors. Even though it may be culturally preferable to have elders instead of youths occupy decision-making positions within the context of Côte d’Ivoire and Africa in general; this trend (low participation of young people) raises concerns about the sustainability of the cooperative and viability of its continued existence, once current members become too old to farm.

The actual level of influence and participation in decision making was beyond the scope of this study but needs further examination in monitoring and future evaluation of the cooperatives’ activities. One of the female cooperative managers led the focus group discussion in the cooperative she manages, showing she has an active role in the cooperative, but other female board members’ role in decision making could not be ascertained since no information was collected from them in this regard.

TABLE 12. MANAGEMENT AND GENDER COMPOSITION OF COOPERATIVES

Cooperatives	Members in general assembly (% of women in parenthesis)			Board of directors members			
	Men	Women	Total	Men	Women	Total	Youths
Coop1	44	0 (0%)	44	7	0	7	1
Coop2	34	0 (0%)	34	4	0	4	1
Coop3	43	0 (0%)	43	6	0	6	1
Coop4	17	4 (19%)	21	5	2	7	0
Coop5	16	2 (11%)	18	/	2	/	/
Total	154	6 (4%)	160	22	4 (16%)	24	3

Our reflection...

- The OHADA-UA allows for member participation in decision making. Even though cooperative leaders stated that participation is effective, it could not be verified. The degree of member participation in cooperative governance depends on various factors, including interest and capacities of the members, attitudes and capacities of the management (and other elites in the cooperative), ease of travel and information sharing. More in-depth discussions with members would be necessary to fully understand the local context for participatory decision making (e.g. who holds power, how is power shared and how are decisions communicated), including one-on-one interviews with board of directors and GA members.
- The OHADA-UA's legal structure for cooperatives raises concerns about the equality of the decision-making process when some actors in the cooperative own significantly greater numbers of shares than others.
- Even though women's membership in the cooperatives is low, proportionally they are better represented in the boards of directors. This suggests that the cooperatives in Côte d'Ivoire have given opportunities for women to be involved in management, which is one of the Fairtrade requirements.
- The baseline provides mixed results related to information sharing. The main mechanism for information sharing appeared to be informal meetings. However, while this certainly forms part of a communication strategy with members, generally communication with members to diffuse information on decision making was weak. There may be additional and perhaps more effective means of sharing information and receiving input from members (e.g. radio, cell phone).
- The indicators used in the baseline provided a suitable starting point for understanding the current state of affairs on governance and participation. However, future monitoring will benefit from more specific and focused indicators that offer deeper insights into the problems at hand and potential solutions. More fine-tuned indicators need to be identified through discussions with cooperative members and their supporters (e.g. SOCODEVI, ANADER).

4.2.2 Capacity for business administration

At the time of data collection, the cooperatives had a number of policy documents to guide decision making:

- **Business management:** Decision making in each cooperative was guided by an established set of by-laws. In addition, each cooperative had a number of committees or working groups whose activities were guided by specific policies and/or strategic documents. None of the cooperatives had a business plan and some were unsure as to what that was.
- **Child labour policy:** All the five cooperatives had a child labour policy implemented by the Child Labour Committee. The committee worked to make parents aware of the importance of children's education and ensure that children of school age attend school and that children do not perform hazardous jobs. For example, the type of loads carried by children as they return from the farm was monitored, and parents were sensitized accordingly.
- **Environmental policy:** All five cooperatives had an environmental policy and committee. The committee

was charged specifically with ensuring, among other things, that (1) members avoid the use of unapproved chemicals for the treatment of pest and diseases; (2) water bodies within or close to farms are protected, as well as wild fauna; and (3) members are conscious of occupational health and safety at all times during farming operations.

Some of the cooperatives did not have activities or evidence to demonstrate the implementation of these policies or strategies. Generally, when a cooperative claimed possession of a policy or strategy, the most common activity cited was awareness-raising with members. Other cooperatives displayed posters or brochures to show implementation of the purported policies or strategies. Despite claims of the existence of policies and or strategies, much has to be done to actually verify their effective implementation. For example, Côte d'Ivoire has come under international pressure for the use of child labour on cocoa farms—it is clear that it will take some time for parents to adjust to new legal requirements and expectations involving child labour. Information about which cooperatives have which specific documents is reported in table 13.

TABLE 13. POLICY DOCUMENTS DECLARED BY COOPERATIVES AND EVIDENCE OF IMPLEMENTATION

	COOP3		COOP2		COOP1		COOP4		COOP5	
	Claim possession	Evidence/activities	Claim possession	Evidence/activities	Claim possession	Evidence/activities	Claim possession	Evidence/activities	Claim possession	Evidence/activities
Child protection /child labour policy	Yes	Awareness raising	Yes	<ul style="list-style-type: none"> •Awareness raising •Hard and soft copies available •Official note posted on notice board 	Yes	<ul style="list-style-type: none"> •Awareness raising on farms •Hard and soft copies •Brochures and posters 	Yes	<ul style="list-style-type: none"> •Awareness raising on children's rights •Sensitization about labour code 	Yes	<ul style="list-style-type: none"> •Awareness raising against worst forms of labour for children
Environmental and health protection policy	Yes	Awareness raising	Yes	<ul style="list-style-type: none"> •Sick workers taken care of 	Yes	<ul style="list-style-type: none"> •Pharmacy box •Official communiqué •Posters and brochures on chemical intoxication •No encroachment into protected areas 	Yes	<ul style="list-style-type: none"> •Reforestation programs (fruit trees, Kotobie, etc.) 	Yes	<ul style="list-style-type: none"> •Awareness raising on forest protection •Awareness raising on abusive use of pesticides
Policy on non-violence	Yes	Awareness raising	Yes	<ul style="list-style-type: none"> •Official announcement forbidding all forms of violence posted on notice board 	Yes	<ul style="list-style-type: none"> •Official communiqué 	No	N/A		
Policy on labour rights	No	N/A	Yes	<ul style="list-style-type: none"> •Official announcement of liberty of association in labour posted on notice board 	Yes	<ul style="list-style-type: none"> •Awareness raising 	No	N/A		
Gender and equity policy	Yes	Awareness raising to attract more women	Yes	<ul style="list-style-type: none"> •Female has been added to board of directors •Official announcement on gender discrimination posted on notice board 	Yes	<ul style="list-style-type: none"> •Campaign to encourage women to join the cooperative •Official communiqué that denounces all forms of discrimination against women 	Yes	<ul style="list-style-type: none"> •Awareness raising to encourage women to register in the cooperatives 	Yes	<ul style="list-style-type: none"> •Insertion of women in management positions; •Awareness raising against discrimination
Income diversification/food security	Yes	Awareness raising to plant other food crops	Yes	<ul style="list-style-type: none"> •Awareness raising 	No	No	Yes	<ul style="list-style-type: none"> •Partnership with GIZ on livelihood programs 	No	N/A
Policy on financial management	Yes	Savings and loan plan	Yes	<ul style="list-style-type: none"> • Savings and loan plan 	No	NR	no	N/A		

Our reflection...

- The lack of business plans and strategies by all cooperatives does not imply that they cannot make meaningful progress in business development. However, it does suggest that careful planning for securing and investing scarce resources has not been carried out. The risk is that the cooperatives advance by trial and error, a potentially effective but also high-risk and expensive way of doing business.
- All cooperatives possess a plan addressing child labour on cocoa production—suggesting that the cooperatives are aware of the importance of the issue and have taken steps to ensure compliance with no child labour in cocoa. However, the baseline is unable to provide information on compliance with the policy, and most cooperatives are still in the early phases of implementation of such policies. It may take some time for effective implementation of these policies.
- Monitoring efforts should attempt to address the structures and processes in place for business administration. However, more fine-tuned indicators could be identified for use in future monitoring through discussions with cooperative members and their facilitating organizations (e.g. SOCODEVI and ANADER).

Summary: human capital—cooperatives

Table 14 presents an overall assessment of the status of human capital of cooperatives, the justification of the

assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 14. SUMMARY—HUMAN CAPITAL ENDOWMENTS (COOPERATIVES)

Indicator	General assessment of current situation*	Justification for assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
2.1. Member participation in decision making	Yellow	All five cooperatives have representatives from sections who participate in the GA, but the number of members in the GA seems small for effective representation of all categories of members. The OHADA-UA's legal framework, particularly pertaining to member shares, raises the question of how democratic the cooperative structure is and whether each member has an equal say in decision-making processes.	<ul style="list-style-type: none"> • Need for regular members, not just section representatives, to join the GA of the cooperative. • Identify and implement ways towards increasing the number and diversity of members taking part in the GA. • Need for further information on perception of influence over decision making.
2.2. Female representation on board of directors, GA	Red	Three cooperatives have no female representation at the GA. One of the cooperatives has a female board chair and also a vice chair. However, given the low membership of women within these cooperatives, low representation in decision-making processes is not surprising.	<ul style="list-style-type: none"> • Identify solutions to increase women's membership within cooperatives. Only then can cooperative work on increasing number of women in GA and in strategic positions on the board of directors.
2.3. Mechanism for sharing information with sections	Yellow	None of the cooperatives have a clear strategy/ mechanism for sharing information but use informal forums. Though these work for now, as membership increases and accountability increases, a more formal communication approach will be needed. All cooperatives have secretaries and minutes books but their capacity to collect and assemble information is weak.	<ul style="list-style-type: none"> • Identify more innovative ways of sharing information, such as through radio or mobile phones. • Build technical capacity within cooperatives to improve taking minutes and record-keeping. • Include farmers' knowledge of important decisions and happenings in the cooperatives in future monitoring.

Indicator	General assessment of current situation*	Justification for assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
2.4. Mechanisms for planning and assessing effectiveness of cooperative	Red	None of the cooperatives have a monitoring plan.	<ul style="list-style-type: none"> Make progress towards setting up a monitoring plan within cooperatives.
2.5. Updated strategic and/or business plan that guides decision making	Red	None of the cooperatives have a business plan.	<ul style="list-style-type: none"> Progress towards all cooperatives having business and strategic plans. Participation of stakeholders in development of business and strategic plans. Look at relevance of plans for cooperatives and sections.
2.6. Possession of policies on child labour, youth, environment and others	Yellow	All five cooperatives have a child labour policy and environmental plan, and three have an income diversification strategy. However, it was difficult to assess effective application of these policies because cooperative leaders do not have committee or activity reports.	<ul style="list-style-type: none"> Monitor progress towards full compliance by cooperatives. Build capacity of cooperatives to generate activity reports demonstrating implementation of policies or activities.
2.7. Trainings facilitated by cooperatives	Yellow	All five cooperatives have received some training, but (1) some training involves only coop leaders—issues of inclusion and effectiveness in play; (2) even though some statistics on trainees and trainers were provided, there is no systematic reporting of activity; (3) trainings have focused on a wide variety of issues, but except for Coop3, relatively limited attention has been given to the management and administration of cooperatives.	<ul style="list-style-type: none"> Begin to implement processes for record-keeping of trainings, taking into account providers, participants (by gender), topics covered and usefulness of trainings (from members' perspective). Arrange follow-up discussion with cooperative members for prioritization of training needs.
2.8. Number of members receiving support services, training on environmental management, child labour, chemical use, etc.	Yellow	This is regrettable given the presence of SOCODEVI, which is specialized in such activities.	<ul style="list-style-type: none"> Environmental and child labour policies known by some members, but no proof whether they are effectively applied.

Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives.

4.3 Physical capital—Fairtrade cooperatives case-study

4.3.1 Asset wealth of the cooperatives

Despite the young age of the cooperatives (most started in the late 1990s), some have been able to make investments in various categories of physical assets, including the acquisition of buildings, trailers, trucks, etc. (table 15). For the production of cocoa, items included motorized sprayers, vehicles for the collection of cocoa, such as trailers and tractors, and equipment for buying and assessing the quality of cocoa purchased, including weighing scales and humidity metres. No records were presented for the items reported in the table 15; the type and value of the investments were based on recall.

During the discussions, there was some confusion as to what actually belongs to the cooperative and what belongs to individuals who have made large investments in the cooperative. Therefore a high probability exists that there are variations in the actual assets held by the cooperatives and what is declared in table 15. Some of the cooperatives' assets were gifts from exporting companies and others were bought with funds from shares and/or profits made from selling cocoa. There was a feeling among the cooperatives leaders that they need to invest in more equipment, especially tractors to transport cocoa from remote villages to the cooperatives' headquarters.

BASELINE FOR ASSESSING THE IMPACT OF FAIRTRADE CERTIFICATION
ON COCOA FARMERS AND COOPERATIVES IN CÔTE D'IVOIRE

TABLE 15. PHYSICAL ASSETS OWNED BY THE COOPERATIVES

Assets	Coop1				Coop2				Coop3			
	Quantity	Year of purchase	Source of funding	Amount/item (USD)	Quantity	Year of purchase	Source of funding	Amount/item (USD)	Quantity	Year of purchase	Source of funding	Amount/item (USD)
Building	0	-	-	0	1	2014	UTZ premium		1	2010	Profits	10 000
Tractor s	0	-	-	0	0	-	-	0	8	2012	Zamacom	16 000
Small truck	0	-	-	0	1	2013	UTZ premium	9000	2	2012	Zamacom	16 000
Trailer	1	2009	Profits	50 000	0	-	-		2	2009	Zamacom	50 000
Motorcycle	4	2014	Shares	9000	7	2012	UTZ premium	820	9	2014	Profits	750
Pharmacy box	1	2006	Profits	118	0	-	-	0	0	-	-	0
Dickey -john moisture metre	0	-	-	0	0	-	-	0	2	2010	Profits	2000
Furniture	1	2006	Profits	600	5	2012	Profits	1140	0	-	-	0
Printer	1	2006	Profits	90	2	2012	UTZ premium	500	0	-	-	0
Fire extinguisher	1	2006	Profits	50	0	-	-	0	0	-	-	0
KPM -humidity metre	0	-	-	0	1	2013	UTZ premium	1600	2	2010	Profits	1600
Motorized sprayer	0	-	-	0	0	-	-	0	10	2011	Profits	1500
Tarpaulin	2	2008	Profits	400	0	-	-	0	0	-	-	0
Analysis scale	0	-	-	0	1	2012	Profits	60	2	2010	Profits	6000
Weighing scale	4	2006	Shares	800	5	2012	Profits	600	0	-	-	0
Computer	1	2013	Profits	700	1	2012	UTZ premium	700	3	2014	Profits	600
Photocopier	1	2006	Profits	1400	0	-	-	0	0	-	-	0
AC	0	-	-	0	1	2012	UTZ premium	840	0	-	-	0

Coop 4					Coop5				
Asset	Quantity	Year of purchase	Source of funding	Amount/ item (USD)	Assets	Quantity	Year of purchase	Source of funding	Amount/ item (USD)
Weighing scale	3	2006/2015	Profits	4500	Weighing scale	3	2012	Profits	2400
Supply truck (trailer)	1	2013	Profits	50 000	Supply truck (Kia)	1	2014	Loan from ECOOKIM	40 000
Supply truck (Kia)	8	2006/2013	Profits	16 000	Furniture	4	2014	Profits	250 000
Furniture	70	2014	Profits	10 800	Printer	1	2014	Profits	70 000
Printer	4	2014	Profits	970	Sprayer (atomizer)	3	2012	Profits	12 000
KPM -humidity metre	1	2012	Profits	1600	Motor bike	4	2013	ECOOKIM	4800
Pallet (holder to be used with forklift)	10	2010	Profits	600	Computer	1	2014	Profits	600
Moto rbike	7	2012/2014	Fairtrade Premium	750					
Computer	4	2012/2015	RA, UTZ	600					
AC	2	2010-2011	Profits	1000					

Table 16 presents an overall assessment of the status of physical capital of cooperatives, the justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 16. SUMMARY: PHYSICAL CAPITAL ENDOWMENTS (COOPERATIVES)

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
3.1. Infrastructure owned or rented (buildings, warehouses)	Yellow	<p>Even though the cooperatives started only in the 1990s, two of five have acquired buildings and other substantial assets such as trucks and trailers (funded by different sources).</p> <p>However, there is sometimes confusion about how some assets are managed, e.g. the trucks and trailers that are used for collecting cocoa from production villages. It was not clear whether those assets belong to the cooperative or to an individual and, in both cases, who manages them.</p>	<ul style="list-style-type: none"> • Make progress towards acquiring building for office space (including assessment of financing options for obtaining space) and acquiring tools and equipment for production and marketing. • Need for a process of thorough review and transparency on who owns which assets in the cooperatives.
3.2. Equipment for business administration and provision of member services	Yellow	<p>All cooperatives have acquired basic office equipment. Only one of the five has farm equipment such as motorized sprayers; some have KPM humidity metres to measure humidity and all have weighing scales.</p>	<ul style="list-style-type: none"> • Assess gaps in tools and equipment and possible options for financing related investments.

* Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives.

4.4 Financial capital—Fairtrade cooperatives case study

4.4.1 Resilient and viable small producer organizations

4.4.1.1 Sources of income. Unlike in Ghana, cooperatives in Côte d'Ivoire are involved in the buying and selling of cocoa. As such, they are less dependent on the Fairtrade Premium since they have a range of different income sources. The main sources of income are entry fees, monthly dues, share capital, profits from sales, premiums from certification schemes and loans (tables 17 and 18).

Though these cooperatives can buy and sell cocoa, unfortunately none of the case study cooperatives systematically recorded volumes and revenues generated from the buying and selling operations. Therefore the revenues and gross margins reported in table 18 were computed based on the minimum producer price and the minimum selling price to an exporter.

Some cooperatives had an annual buying and selling turnover of more than XOF 1.6 billion (USD 3.2 million), with annual gross margins of more than XOF 120 million (USD 240 000) (table 18). It was not clear from the discussions how these profits were used or shared. It was reported that generally they were used to buy inputs that were distributed to members and, in some cases, for running the cooperatives. The amount of such profits that went to members as cash could not be traced.

This limited record-keeping on volumes sold, revenues generated and use of revenue by the cooperative indicated low capacity for basic bookkeeping within the cooperative.

This raises concerns about the transparency of operations within the cooperative and puts the organization at risk of corruption and misuse of funds. Newly established, the cooperatives could lack some capacity to build effective financial management structures, therefore more monitoring and capacity building in this area needs to be done to ensure that cooperatives are safeguarded from financial mismanagement.

Affiliation fees were USD 2 to USD 10 per member, depending on the cooperative. Shares also varied from USD 20 to USD 48 (table 17). Some members had paid their entrance fees, but a majority had not. Some cooperatives, for example Coop1, reduced the amount of each share by more than half in order to lure members to pay, yet high rates of non-payments were still reported.

Premiums from different certification schemes were also important sources of revenue for most of the cooperatives (table 18). However, the contribution of premiums, including that of Fairtrade, to the total revenue of the cooperatives could not be calculated because of poor cooperative record-keeping. Fairtrade Premiums were used for various purposes: the proportion distributed to members as bonuses ranged from 25 to 50 percent, depending on the stipulations in each cooperative. At least two cooperatives used part of the Fairtrade Premium to purchase inputs. Such amounts may still be considered as part of the Fairtrade Premium that went directly to members.

Some cooperatives had received loans. For example, Coop1 contracted a loan of USD 64 000 from Shared Interest with ECOOKIM standing as guarantor. Likewise, Coop5 signed bank loans with ECOOKIM standing as guarantor. Details about these loans were unavailable.

TABLE 17. SOURCES OF FUNDING FOR THE COOPERATIVES OTHER THAN PREMIUMS

Cooperatives	Source of income	Amount per affiliated society member (USD)	Total amount expected/ cooperative (USD)	Comment
Coop1	Entrance fee	4	1588	All registered members have paid.
	Shares	48	19 056	Shares were reduced from USD 80 to USD 48, and from 2014 it was further reduced to USD 10. All 250 initially registered members paid their shares.
	Loans from the bank	N/A	64 000	Amount was borrowed from shared interest.
Coop2	Entrance fee	4	2456	
	Shares	20	16 400	

Cooperatives	Source of income	Amount per affiliated society member (USD)	Total amount expected/ cooperative (USD)	Comment
Coop3	Entrance fee	4	720	Paid once by each society upon entry; most members have paid.
	Shares	40	36 000	About 10 members have paid.
Coop4	Entrance fee	2	1426	
	Social capital	20	14 260	
	Profits from sales	0.18/kg	280 720	
	Loans			
Coop5	Entrance fee	10	3260	
	Social capital	20	6520	
	Profits from sales	0.18/kg	N/A	

N/A = Not available

TABLE 18. REVENUE FROM COCOA SALES INCLUDING FAIRTRADE PREMIUM

Cooperative	Year	Total revenue from cocoa sales (USD)	Gross margin based on differences between buying and selling prices (USD)	Fairtrade Premium (USD)	Share of Fairtrade Premium distributed to members (%)	Share of Fairtrade Premium used for cooperative management (%)	Share of Fairtrade Premium used for purchase of inputs (%)	Percentage reserved for community development (%)
Coop1	2013/2014	2 924 586	216 636	56 000	50	25	N/A	25
	2012/2013	1754	117 138	0	50	25	25	0
Coop2	2013/2014	3 240 381	240 029	0	0	0	N/A	0
	2012/2013	2 341 113	197 840	0	0	10	N/A	0
Coop3	2013/2014	2 638 469	195 444	0	50	0	N/A	0
	2012/2013	1 922 380	162 455	0	50	0	N/A	10
Coop4	2014/2015	2 673 220	N/A	139 982	25	30	25	20
	2013/2014	2 200 389	N/A	61 870	25	30	25	20
	2012/2013	1 911 185	N/A	0	0	0	0	0
Coop5	2014/2015	13 373	N/A	13 373	28	47	N/A	9
	2013/2014	8694	N/A	8694	31	42	N/A	10
	2012/2013	55 115	N/A	0	0	0	N/A	0

Note: some percentages on use of the Fairtrade Premium do not add up to 100 percent due to lack of reliable data.

4.4.1.2 Financial services to members. The five case-study cooperatives rendered different kinds of financial services to their members (table 19). Loans and input services were common in all five cooperatives. In addition to these, Coop3 offered saving schemes to its members. In 2014, for example, Coop3 estimated that members would save XOF 20 million (USD 40 000) that would otherwise have been used to purchase inputs. At the end of the year, some members had saved XOF 10 000–100 000 (USD 20–200),

for a total XOF 15 million (USD 30 000). Within the same period, Coop3 prepared a budget of XOF 20 million (USD 40 000) to be used to purchase inputs for members at more favourable prices. A similar input scheme was run by Coop1, which budgeted XOF 7 million (USD 14 000) to purchase inputs. Each member received pesticides worth XOF 17 000 (US 34) that could be used for 4 ha of land (two containers + 16 sachets of pesticides).

TABLE 19. FINANCIAL SERVICES RENDERED TO MEMBERS

Cooperative	Service	Amount budgeted/ estimated (USD)	Amount distributed (USD)	Minimum amount per member (USD)	Maximum amount per member (USD)	Source of funding
Coop1	Loans to members	1000	1000	Depending on needs	100	Fairtrade Premium
	Savings	None	None	None	None	None
	Inputs	14 000	16 000	34/4 ha		Fairtrade Premium
Coop2	Loans to members	60 000	60 000	Depending on need	10 000	Profits/UTZ premium
	Savings	None	None	None	None	None
	Inputs	25% of premium	37 395			UTZ premium
Coop3	Loans to members	18 000	14 000	400	600	Profits
	Inputs savings plan	30 000		40	200	Profits
	Inputs grants	40 000	30 000	180	900	Profits/shares
Coop4	Loans to members	20 000	60 000	20	2000	Profits
	Inputs	18 000	18 000	20	40	Fairtrade, UTZ, RA premium
Coop5	Inputs	1600	1600	4	5	UTZ premium

4.4.1.3 Community development and member support services. In addition to the financial services, Coop2 offered the following amenities to its members in the 2013/2014 season:

- Training services through consultants: XOF 4.5 million (USD 9000)
- Tree-planting material given to members: XOF 2 million (USD 4000)
- Jute bags: XOF 1.5 million (USD 3000)
- Dryers: XOF 1.2 million (USD 2400)

All of the above was paid for with funds from premiums the cooperative got from other certification schemes, except the jute bags, which were financed by the cooperative's buying and selling operations. Table 20 shows premium from other certification schemes, and distribution of the Fairtrade Premium.

Coop1 received a Fairtrade Premium of XOF 28 million (USD 56 000) in the 2013/2014 season (table 20). The Fairtrade Premium was used as follows: 50 percent was distributed to members as bonuses (25 percent) and inputs (25 percent); 25 percent was used for community development and the remaining

25 percent was used for cooperative management. These allocations are not fixed and may change from year to year. For example, future projects highlighted by Coop1 in its Fairtrade development plan included

purchase of a vehicle, bikes for farmer leaders serving as extension officers and free distribution of inputs to members. For community development, it planned to provide school kits to members' children.

TABLE 20. DISTRIBUTION OF PREMIUMS

Cooperative	Year	Premium from certification schemes other than Fairtrade (USD)	Fairtrade Premium (USD)	Share of Fairtrade Premium distributed to members as bonuses (%)	Share of Fairtrade Premium used for cooperative management (%)	Share of Fairtrade Premium used for purchase of inputs (%)	Share of Fairtrade Premium reserved for community development (%)
Coop3	2013/2014	216 555	0				
	2012/2013	155 800	0				
Coop2	2013/2014	17 9581					
	2012/2013	78 360	0				
Coop1	2013/2014		56 000	50	25		25
	2012/2013	27 000	N/A	N/A	N/A	N/A	N/A
Coop4	2014/2015	127 387	139 981	25	30	25	20
	2013/2014	137 1282	61 870	25	30	25	20
	2012/2013	200 471	0	0	0	0	0
Coop5	2014/2015	0	13 373	28	47		9
	2013/2014	0	8694	31	42		10
	2012/2013	0	0	0	0		0

Note: this table captures premiums only; margins from cocoa sales are reported in table 18. Also note percentages in coop5 do not sum to 100% because of lack of appropriate data.

Besides coordination for Fairtrade activities, the cooperatives carried out other functions in the value chain, such as buying, storage and selling. The margins of selling were fixed by the State as the difference between the minimum sales price of the cooperatives and the minimum price they needed to pay to the producers. Given that both were minimum prices, the effective sales margin of a given cooperative could vary according to the price it received from the buyer and the price it paid to its members.

The proceeds from sales were used to meet investment and running costs, including staff salaries, but as mentioned

earlier, how farmers received some of it could not be established. Other services carried out by the cooperative were related to transport but, again, the details of how this was put into practice was unclear. Some Côte d'Ivoire cooperatives directly export cocoa, but none of the case-study cooperatives fell into this category. It was not possible to compute the relative contribution of each source of funds to the total capital of each society because of lack of appropriate data.

Summary: financial capital—cooperatives

Table 21 presents an overall assessment of the status of human capital of cooperatives, the justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 21. SUMMARY—FINANCIAL CAPITAL ENDOWMENTS (COOPERATIVES)

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
4.1. Credit received from banks 4.2. Financial services offered to members by cooperatives	Yellow	Two of the five cooperatives have received loans (or other types of financial services) from commercial banks or other lending sources; all have provided members with small amounts of credit in cash and inputs but much remains to be done to increase loan volume given to members and cooperatives.	<ul style="list-style-type: none"> Fairtrade can work with cooperatives to identify financial capital needs as well as their ability to manage these finances and repay any loans received. Monitoring can assess progress made in accessing loans and offering services to members.
4.3. Funds invested in community development	Yellow	The three cooperatives that have received Fairtrade Premium allocate from eight to 25 percent for community development	<ul style="list-style-type: none"> Further monitoring needs to be done to assess the amounts reserved for community development, what investments are being carried out, how much is being invested and future plans for investment.
4.4. Funds distributed to members as bonuses	Green	All cooperatives that have received Fairtrade Premium give bonuses to members and they all have rationale for allocating specific percentages as bonuses.	<ul style="list-style-type: none"> Fairtrade needs to monitor further the amount of Fairtrade Premium disbursed to members as bonuses on top of income received from cocoa sales, particularly the impact value for members.
4.5. Activities carried in the chain	Yellow	Besides coordination, cooperatives provide support services such as inputs and transportation. Even though the operational mechanism of transport services is unclear, it nevertheless provides opportunities for members to transport produce to the cooperatives.	<ul style="list-style-type: none"> Cooperatives could integrate other activities along the value chain, especially operating as an export company if they have the capacity to do so.
4.6. Income from member dues, Fairtrade Premium, and other sources	Yellow	<p>All cooperatives have reported their sources of income: from member contributions and margins generated from buying and selling cocoa. As with other quantitative data, there are no records.</p> <p>While detailed information on income sources is unavailable, it is clear that cooperatives have two major sources of income: premiums and sales margins. Other sources such as membership fees are relatively insignificant and loan services are uncommon.</p> <p>The lack of information on total income reflects again the cooperatives' limited capacity in basic business administration. Future growth and development depends on building the capacity of a group of members to effectively run the cooperatives as businesses, including oversight of financial and administrative matters.</p>	<ul style="list-style-type: none"> Progress made in archiving members' contribution and use of margins from buying and selling activities.

* Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives.

5

HOUSEHOLD-LEVEL ASSESSMENT

A total of 539 household interviews, instead of the 522 initially planned, were conducted in Côte d'Ivoire with 436 cooperative members and 103 non-members. The extra 17 interviews were meant to compensate for missing data and other poorly entered questionnaires. Of the total sample, 93.7 percent were men (table 22 and fig 4). The low number of female respondents (6.3 percent) is a reflection of the low number of registered female members in cocoa cooperatives in the country.

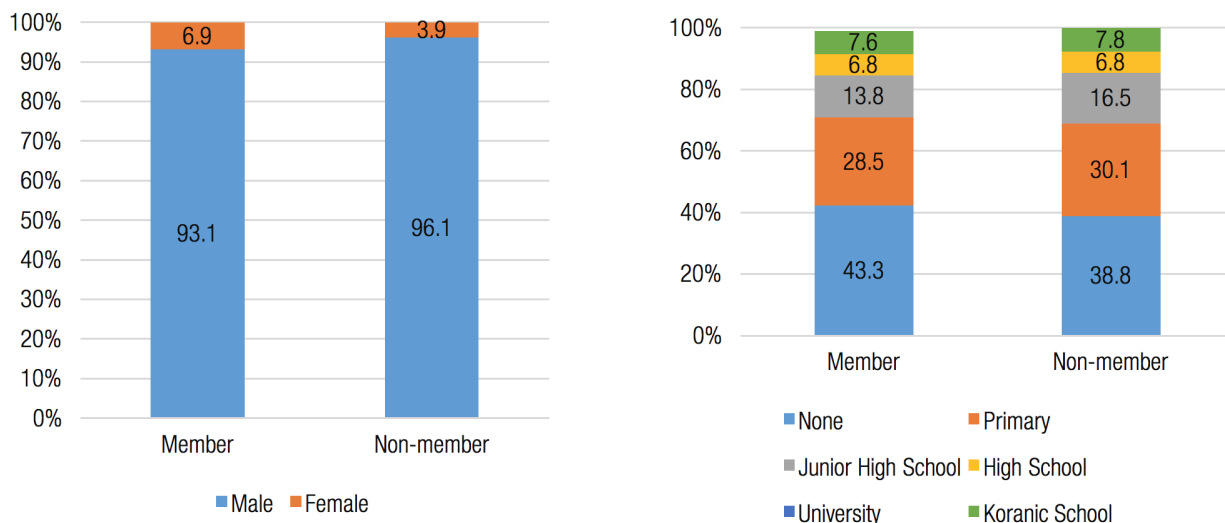
The mean age of respondents was 45 years (+/-13) and there was no significant statistical difference between the ages of members (45 years) and non-members (43 years). Youth members of focus-group discussions said they

were more attracted by other sectors such as oil palm and rubber, because cocoa was not seen as lucrative and required higher investment costs to improve production. Focus-group discussions also revealed that many young people are moving to urban areas for formal employment, which poses a threat to the long-term sustainability and viability of the cocoa sector.

Cooperative members have been members of the cooperatives for an average of about 3.5 years and have lived in the communities longer than non-members. The age factor and living together longer might have facilitated the building of trust among members and thus eased association in groups.

TABLE 22. COMPARISON OF GENERAL HOUSEHOLD CHARACTERISTICS BETWEEN MEMBERS AND NON-MEMBERS

Characteristic	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total sample	
Experience with cooperative (years)					
	Mean	3.54	.	3.54	
	Standard Deviation	2.65	.	2.65	
	Valid N	379	0	379	
Longevity in village (years)					
	Mean	28.22	24.37	27.41	t = 3.38 p = 0.018
	Standard Deviation	14.66	13.81	14.55	
	Valid N	385	102	487	
Age of respondent (years)					
	Mean	45	43	45	t = 1.56 p = 0.12
	Standard Deviation	13	15	13	
	Valid N	436	103	539	


FIGURE 4. GENDER COMPOSITION OF RESPONDENTS AND LEVEL OF EDUCATION

5.1 Natural capital—farming households

5.1.1 Landholdings and land use

Sampled farmers had an average of 1.9 farm plots, with an average plot size of 3.54 ha (table 23). Members had a higher number of farm plots (1.95) and larger plot sizes (3.65

ha) than non-members (1.68 farm plots and 3.03 ha per plot, respectively). No specific reasons were found to explain these differences.

TABLE 23. AVERAGE PLOT SIZE AND NUMBER OF FARM PLOTS (COCOA AND NON-COCOA) OWNED BY RESPONDENTS, SEGREGATED BY MEMBERSHIP

Variable	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total sample	
Average plot size per farmer in ha					
	Mean	3.65	3.03	3.54	$t = 2.124$ $p = 0.034$
	Standard Deviation	2.72	2.32	2.66	
	Minimum	0.38	0.5	0.38	
	Maximum	18.5	12	18.5	
	Valid N	434	100	534	
Number of farm plots					
	Mean	1.95	1.68	1.9	$t = 2.306$ $p = 0.021$
	Standard Deviation	1.09	0.94	1.07	
	Minimum	1	1	1	
	Maximum	7	7	7	
	Valid N	434	100	534	

The data on total farm size must be considered with caution. The data varied considerably among farmers, cooperative membership, cooperatives and gender. Total average farm size (cocoa and non-cocoa fields) reported for both members and non-members was 6.16 ha (+/- 5.2 ha) (table 24). Members had significantly higher total farm size (6.38

ha) than non-members (5.25 ha). Sizes varied from 0.96 to 37 ha. The total average farm size reported by farmers in this study was comparatively smaller than the 10 to 13 ha found by a USAID report (USAID 2013). However, the USAID report considered fallows and forest land that farmers in this case study might not have included.

TABLE 24. TOTAL FARM SIZE (HA) SEGREGATED BY COOPERATIVE MEMBERSHIP

Variable	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total sample	
Total farm size per farmer in ha					
	Mean	6.38	5.25	6.16	t = 2.30 p = 0.021
	Standard Deviation	5.09	5.59	5.2	
	Minimum	0.96	0.5	0.5	
	Maximum	37	38	38	
	Valid N	434	103	537	

Male farmers had larger farms than did women (table 25) but the difference was not significant. In Côte d'Ivoire, data on farm sizes were generally scarce; in the few cases that they existed, they were contradictory. This suggests that

the above data reported by farmers should be handled with caution, especially since most of the information was based on farmers' estimates, not actual measurements.

TABLE 25. TOTAL FARM SIZE (HA) SEGREGATED BY GENDER

Variable	Statistic	Gender of respondent		Total sample	Test statistic
		Male	Female		
Total farm size in ha					
	Mean	6.24	4.8	6.14	t = 1.56 p = 0.118
	Standard Deviation	5.28	3.53	5.19	
	Minimum	0.5	1	0.5	
	Maximum	38	20	38	
	Valid N	502	34	536	

5.1.1.1 Land-use diversification and area dedicated to

COCOA. Land-use diversification was assessed by asking respondents what proportion of their fields were only in cocoa and in cocoa and food crops. Results show that both members and non-members planted approximately 30.5 percent of their plots with cocoa only, and 20.7 percent with food crops only (fig 5).

These data suggest that both members and non-members have diversified their land use, but more members than non-members have diversified into other crops, mainly food

crops and fruit trees. The higher proportion of members who diversified may be the result of awareness-raising efforts by NGOs that advise them to diversify their livelihood options. Additionally, some of the cooperatives, as mentioned in section 4.2.2, have policies that encourage members to diversify into other crops.

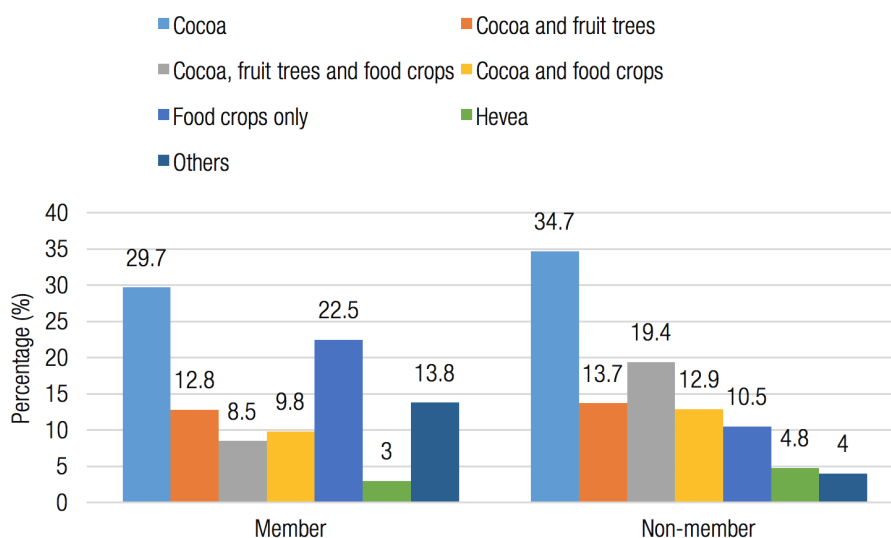


FIGURE 5. PERCENTAGE OF FIELDS PLANTED WITH DIFFERENT CROPS, MEMBERS AND NON-MEMBERS

About 10 percent of fields of both members and non-members contained cocoa and fruit trees; such a system is referred to as cocoa agroforestry. Cocoa agroforestry options are used as a low-input strategy or an alternative to intensify cocoa fields and are more common in Cameroon than in Ghana and Côte d'Ivoire. The scientific arguments underlying this practice are that the biomass provided by the companion trees reduces the need for chemical fertilizers in cocoa farms, provides shade and provides tree products

that supply alternative sources of income for farmers (Alemagi et al 2014).

Respondents were asked to estimate what proportion of each of their mixed farm plots (cocoa and other crops) was actually dedicated to cocoa production. We found that most of the mixed cocoa plots were dominated by cocoa. In about 61 percent of the fields, cocoa covered 75 to 100 percent of the total surface (fig 6).

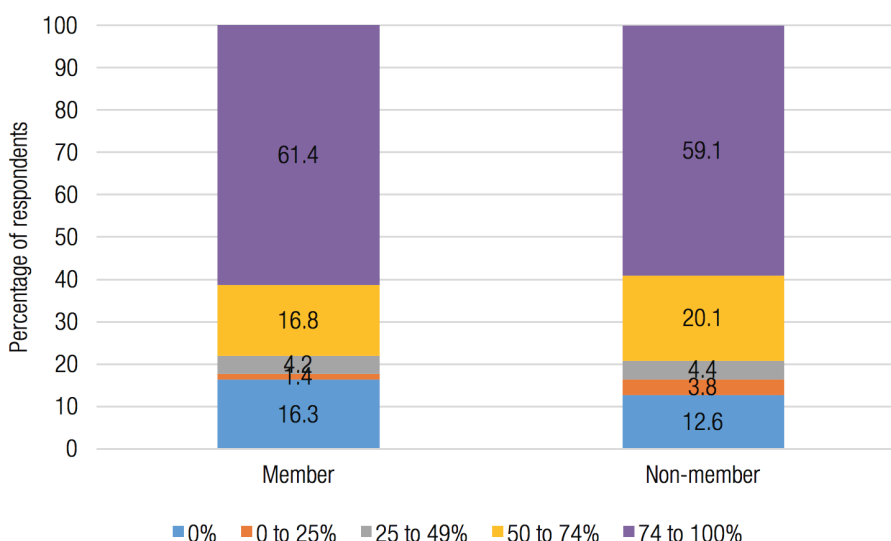


FIGURE 6. PERCENTAGE OF COCOA COVERAGE ON PLOTS, MEMBERS AND NON-MEMBERS

5.1.1.2 Form of plot acquisition. Of the 996 plots reported by members and non-members, about half (52 percent) were acquired through inheritance, 36.1 percent were purchased and the other forms of land acquisition included

gifts and rents. No major differences appeared between cooperative members and non-members (fig 7). However, more plots farmed by non-members (39.7 percent) were purchased than plots farmed by members (35.4 percent).

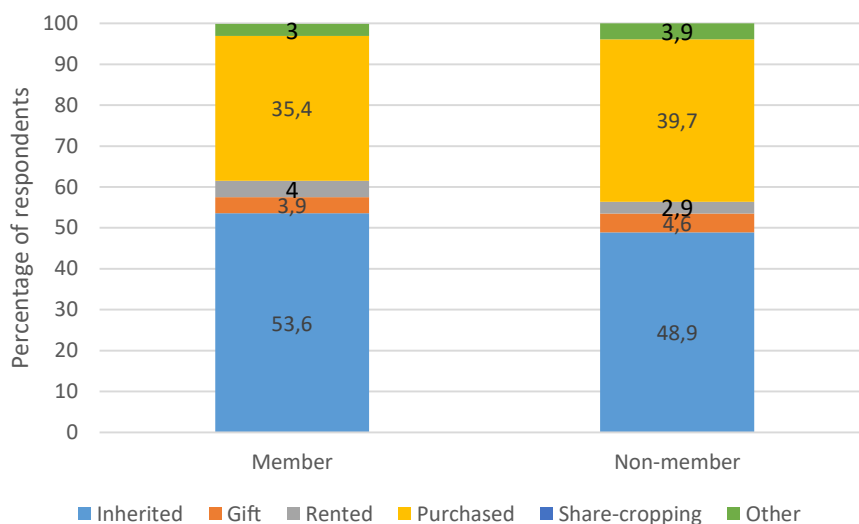


FIGURE 7. MODE OF LAND ACQUISITION, MEMBERS AND NON-MEMBERS

5.1.2 Cocoa trees and factors affecting cocoa productivity

Insights into cocoa productive capacity were obtained through data collection on five indicators: (1) the age of cocoa farms, (2) whether respondents had practiced pruning, (3) variety of cocoa planted, (4) whether respondents had replanted their farms, and (5) whether they had integrated fruit trees into their farms in the past five years (for diversification or shade purposes). A reference period of five years from the time the questionnaire was administered was applied because these activities could be carried out once in a while rather than annually.

5.1.2.1 Age of cocoa fields. The old age of cocoa trees has been highlighted as one of the major causes of low yields in most cocoa-producing countries. In general, the economic life of a cocoa tree is from 30 to 40 years. About 20 percent of plots of both members and non-members were said to be

more than 30 years old, thus already in a stage of declining production. However, about half of the plots (53.7 percent) were estimated to be between 10 and 29 years, which can be considered the prime age of production. These, added to the 26 percent that, according to respondents, were less than 10 years old, indicated that most of the cocoa plots in the surveyed cooperatives were still very productive.

Non-members had more cocoa plots that were more than 30 years old (23.7 percent) than members (19.8 percent) (fig 8). This may indicate that more members have been involved in training that enabled them to renew their farms. It may also be that producers with younger plantations were more interested in joining cooperatives, and that those with older plantations did not value the activity in the same manner, because their cocoa trees were no longer so productive.

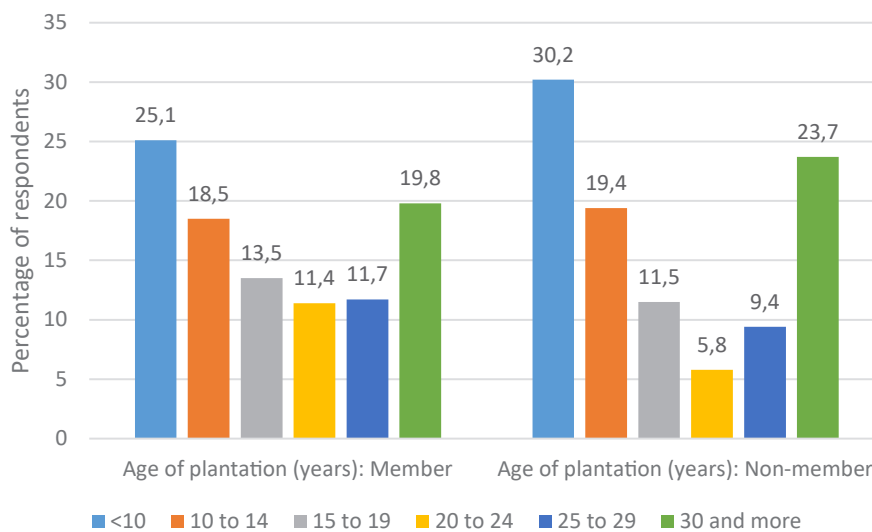


FIGURE 8. AGE OF COCOA PLANTATIONS, MEMBERS AND NON-MEMBERS

5.1.2.2 Pruning and replanting. Only about 16.6 percent of cocoa producers reported that they had pruned their farms at least once in the past five years, while 10.7 percent of farmers reported that they had undertaken replanting over the same period (fig 9). This is regrettable as these two activities constitute good agricultural practices that increase

yields. The low rates of pruning and replanting may be a result of the relatively young age of the farms or that farmers generally had neither the knowledge nor tools to carry out pruning. No major differences in pruning and replanting practices appeared between members and non-members.

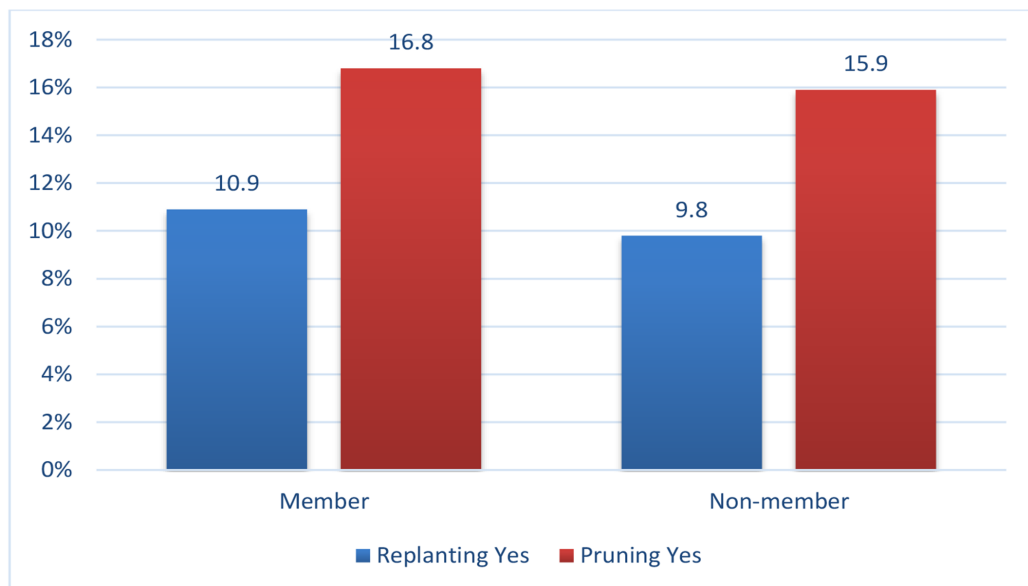


FIGURE 9. PERCENTAGE OF FARMERS WHO HAVE REPLANTED AND PRUNED THEIR FARMS

5.1.2.3 Variety of cocoa grown. Respondents were asked to rank in order of importance the variety of cocoa that they planted on each of their cocoa fields (table 26). Tout venant, local French, Mercedes and Guyanese clones were among the varieties that could be easily identified by the farmers. Of the 1312 times that a variety was recorded, tout venant was

reported 22 percent of the time, followed by local French (11.97 percent) and others (59.5 percent). Mercedes and Guyanese clones were among the high-yielding varieties of cocoa reported by farmers. The Mercedes variety is a high-yielding cultivar, resistant to drought and diseases, leading many farmers to adopt it (Daisy 2014).

TABLE 26. RANKING OF THE TOP THREE COCOA VARIETIES ON FARMS

Variety	Ranking			
	First N (%)	Second N (%)	Third N (%)	Total N (%)
Tout venant (Ghana)	174 (69.05)	115 (17.45)	2 (0.5)	291 (22.18)
Local (French)	41 (16.27)	113 (17.15)	30.75	157 (11.97)
Mercedez	27 (10.71)	36 (5.46)	16 (3.99)	79 (6.02)
Guyanese clone	1 (0.40)	3 (0.46)	0 (0.00)	4 (0.3)
Others	9 (3.57)	392 (59.48)	380 (94.76)	781 (59.53)
Total	252 (100)	659 (100)	401 (100)	1312 (100)

N= number of fields

5.2.1.4 Perception of soil fertility. Soil fertility is one of the factors that affect cocoa yields in West Africa. Most fields (71 percent) were perceived by both cooperative members and non-members to have either “good” or “very good” fertility (fig 10) The high proportion of farmers assessing their cocoa fields as such may be because farmers may

not actually link current yields to fertility, as it is scarcely perceived as an issue in cocoa production compared with factors such as pests and diseases. Future monitoring and evaluation of soil fertility on cocoa farms could be aided by a series of farm observation visits that would give the research team direct knowledge of soil quality and fertility.



FIGURE 10. FARMERS' PERCEPTIONS OF SOIL FERTILITY, MEMBERS AND NON-MEMBERS

5.1.3 Production and productivity

Data on production were calculated based on the 2012/2013 production season. This information was collected by disaggregating the request into high and low seasons. It was assumed that farmers would be more accurate in their responses than if asked about the entire year.

Results showed significant difference in cocoa yields between members (446 kg ha⁻¹) and non-members (370 kg ha⁻¹) and 432 kg ha⁻¹ for both members and non-members (table 27). Further analysis showed that only about 28.6 percent of members and 20.4 percent of non-members reported production of more than 2.8 tonnes in the 2012/2013 production season (fig 11). Similarly, more

members than non-members reported yields per hectare higher than 500 kg (fig12). These reported average yields were comparatively lower than the annual yield in the country for the past 20 years, estimated at 500–600 kg ha⁻¹ (Wessel and Quist-Wessel 2015).

Based on available data, we may not have enough reasons to explain why members had higher yields compared to non-members. Possible reasons for the low yields could be that many of the fields were mixed fields and it is unknown whether the average yields reported by other studies were based on mono or mixed cocoa fields. The low calculated yields could also be related to inaccurate data reported by the respondents for farm size and production.

TABLE 27. PRODUCTION AND PRODUCTIVITY 2012/2013 PRODUCTION SEASON

Variable	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total	
Production in tonnes					
	Mean	2.17	1.44	2.03	t = 3.192 p = 0.001
	Standard Deviation	2.1	1.67	2.04	
	Valid N	427	98	525	
Cocoa farm yields tonnes/ha					
	Mean	0.4469	0.3704	0.4326	t = 1.345 p = 0.0765
	Standard Deviation	0.5035	0.5243	0.5079	
	Valid N	425	98	523	

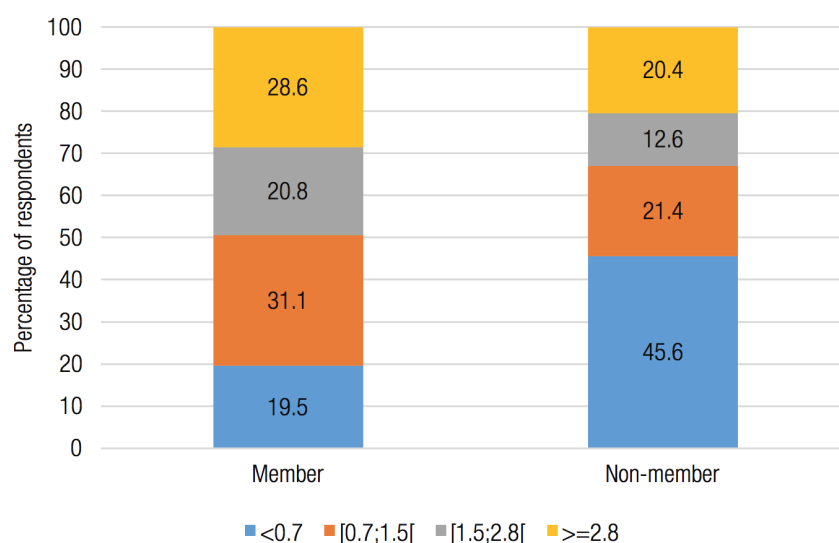


FIGURE 11. PERCENTAGE OF FARMERS IN CATEGORIES OF TOTAL PRODUCTION (TONNES), 2012/2013 SEASON

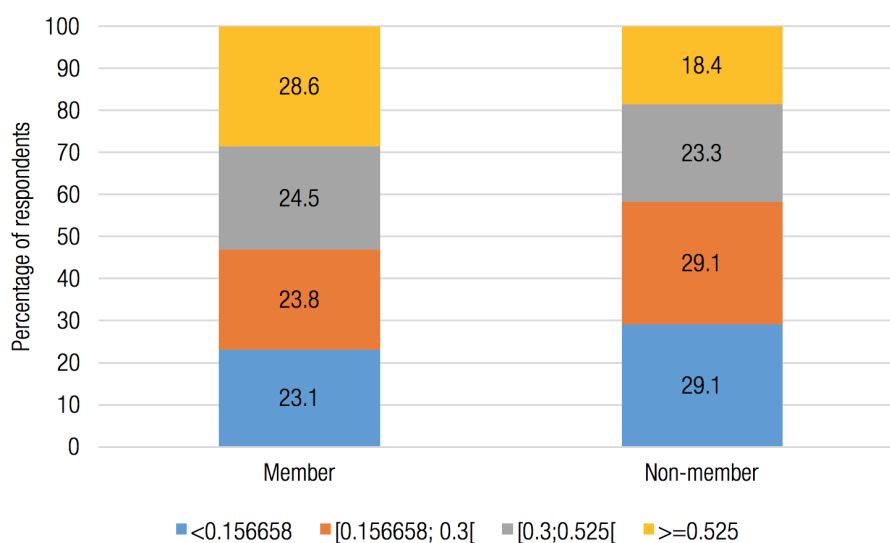


FIGURE 12. PERCENTAGE OF FARMERS IN DIFFERENT YIELD CATEGORIES (TONNES PER HECTARE), 2012/2013 SEASON

Our reflection/analysis ...

- Farming households in this sample do not seem to be making progress towards the adoption of agricultural techniques that contribute to increase productivity. Pruning and replanting have been done by less than 15 percent of farmers. Provision of modern pruning equipment may help to reduce the work involved in pruning resulting to wider adoption by farmers. Provision of improved cocoa varieties could encourage the farmers to replace old trees with the new varieties.
- The indicators of good agricultural practices need to be followed closely, especially as farmers reported that they contribute to improved productivity. Literature demonstrates a remarkable increase in production in the 2013/2014 production season in Côte d'Ivoire, and it is reported that the 40 percent price increase for cocoa during this period spurred farmers to adopt good agricultural practices and use more inputs on their farms, later contributing to increased productivity in the country. This, however, contradicts the results presented that show that a majority of the farmers practiced neither pruning nor planting new fields. The increase, then, may be related to other practices such as pesticide use, which is discussed in section 5.2.1.

Summary: Natural capital—cocoa-producing households

Table 28 presents an overall assessment of the status of natural capital of cocoa-producing households, the

justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 28. SUMMARY—NATURAL CAPITAL HELD BY COCOA-PRODUCING HOUSEHOLDS

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
1.1. Land ownership and tenure arrangements	Yellow	Average reported farm size is about 6 ha—relatively large by some standards (e.g. Indonesia and Central America).	Note should be taken that farm sizes in Côte d'Ivoire reported by farmers may not be accurate. Land markets are comparatively higher compared with countries such as Ghana, where they are almost non-existent.
1.2. Area under production 1.3. Area dedicated to cocoa	Yellow	Cocoa is the most important agricultural activity for most of the farming households—about 61 percent of the fields have cocoa covering 75 to 100 percent of respondents' lands. About 29 percent of members' fields are planted only in cocoa. Members made more efforts to diversify farm income than non-members	Diversification of cocoa-farming systems is important to mitigate risk and ensure food security.
1.4. Average cocoa plantation age and renewal of cocoa farms	Yellow	Most trees in the cocoa plantations are 10 to 29 years old. About 15 percent of farmers perform pruning and about 10 percent have replanted in years prior to data collection.	Cooperatives need to identify reasons and identify solutions for low level of pruning and replanting among cooperative members. This may include identifying financial rather than capacity-building initiatives.
1.5. Cocoa production volume	Red	Data on production and productivity are calculated based on farmers' recall. Average yield is calculated to be 486 for members and 370 for non-members. Members' yields are comparatively higher and closer to national average than those of non-members.	We strongly recommend that the monitoring system include a rigorous system for evaluating yields and key factors that determine yield (e.g. fertilizer application, agronomic practices). More accurate productivity estimates also require addressing the inaccuracies in land size estimates.

* *Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives.*

5.2 Physical capital—farming households

5.2.1 Use of farm tools and inputs

5.2.1.1 Agricultural equipment owned by respondent households. Both members and non-member households own/use simple and cheap farm equipment. About 41 percent of members and 38.8 percent of non-members use manual spraying machines; 12.4 percent of members and 6.8 percent of non-members use motorized sprayers. About 8.5 percent of members, compared with 4.9 percent of non-members, use modern pruning equipment (fig 13). The low use of motorized spraying machines by both members and non-members may be related to their relatively

higher costs compared with manual spraying equipment. Assisting cooperative members in obtaining such expensive equipment may help reduce time and labour costs. In general, the data suggest that more members than non-members use/own motorized spraying machines or modern pruning tools. Use of these tools facilitate the adoption of good agricultural practices and may explain why the yields of members were significantly higher than those of non-members.

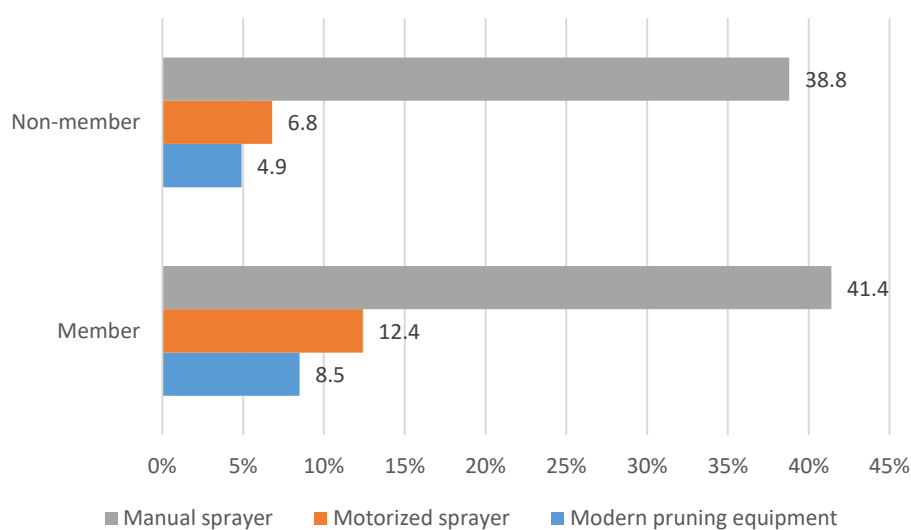


FIGURE 13. AGRICULTURAL EQUIPMENT AND TOOLS OWNED BY HOUSEHOLDS, MEMBERS AND NON-MEMBERS

5.2.1.2 Use of inputs. Results in research stations in Côte d'Ivoire show that proper application of inputs, in combination with good farm management, can increase cocoa yields by about 50 to 100 percent. Studies point to good maintenance and integrated pest and disease control responsible for increased average yields by 40 percent, from about 500 kg ha⁻¹ to 700 kg ha⁻¹. Additional use of fertilizers increased yields per ha to about 1000 kg (Wessel and Quist-Wessel 2015). Farmers were asked whether they used inputs during the 2012/2013 production season; results showed that only about 40 percent of both cooperative and non-cooperative members used insecticides (fig 14).

The low proportion of farmers using fertilizers confirmed previous results and the discussion that most of the farmers perceived their soils to be fertile or very fertile. The proportion of farmers who adequately applied inputs was quite small. Preliminary results of the use of fertilizers specifically designed for cocoa showed that fertilizers were highly profitable for cocoa production, but adoption in Côte d'Ivoire remained low and often unprofitable. This

was largely because the prices of cocoa remained below XOF 800 (USD 1.60) per kilogram while the price per bag of fertilizer was about XOF 20 000 (USD 40), approximately XOF 400 (USD 0.80) per kilogram. In other farm trials in Côte d'Ivoire, results showed that expected increase in production was often insufficient to compensate for the estimated costs of fertilizers (Ruf and Beni 2011).

More members (24.6 percent) than non-members (21.3 percent) used fertilizer, but more non-members (34.1 percent) used pesticides, compared with members (21.3 percent) (fig 14). Further analysis revealed that about 35.3 percent and 37.5 percent of members and non-members, respectively, used fertilizer regularly (fig 15), while most of the farmers used them when they observed major problems, such as reduction in yields. Cooperative members generally spent more on insecticides, fertilizers and small farm tools (machetes, hoes, files, rudimentary pruning tools, etc.) than non-members (table 29). This may explain differences observed in yields, where members' yields were significantly higher than those of non-members.

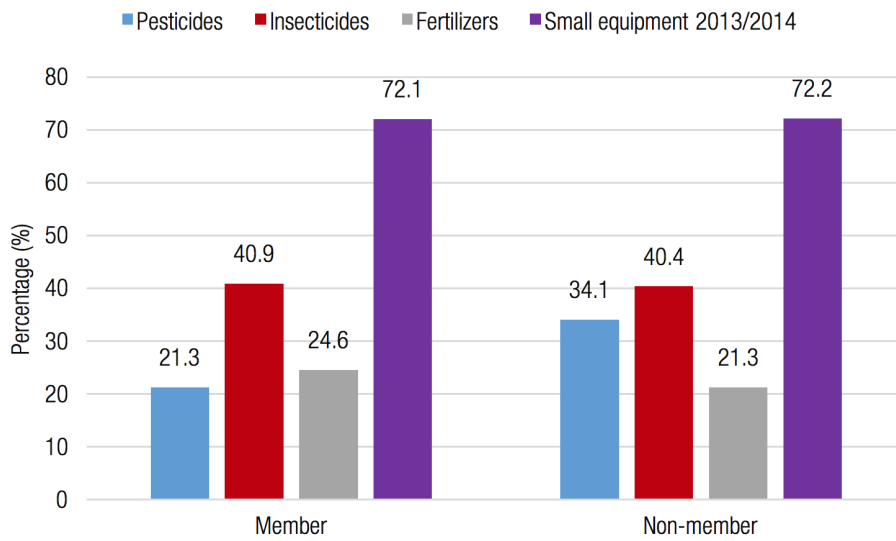


FIGURE 14. PERCENTAGE OF FARMERS USING DIFFERENT TYPES OF INPUTS (INPUTS USED, REGARDLESS OF FREQUENCY), MEMBERS AND NON-MEMBERS

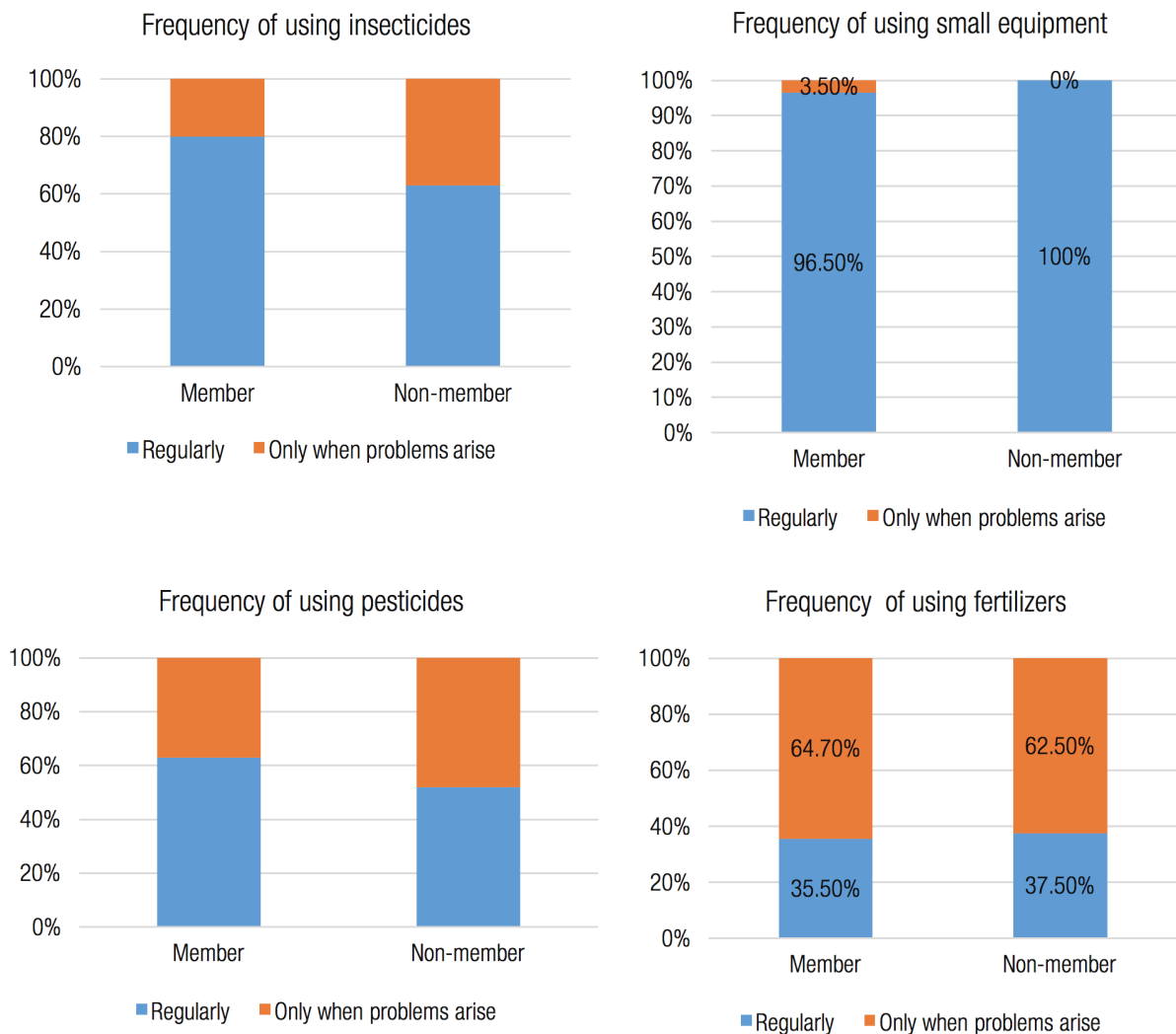


FIGURE 15. FREQUENCY OF USE OF DIFFERENT INPUTS (BY PRODUCERS WHO RESPONDED "YES" TO USE OF INPUTS)

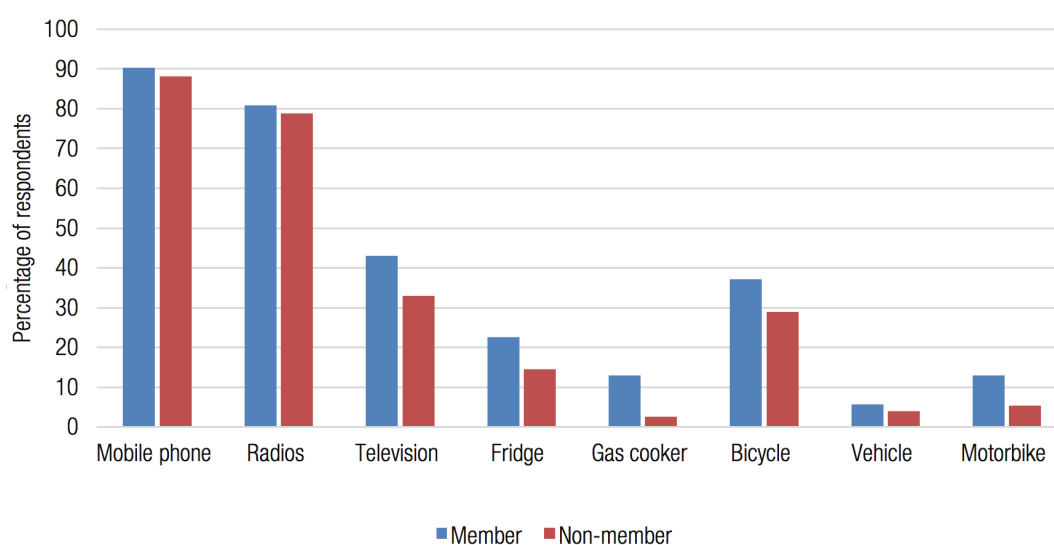
TABLE 29. AMOUNTS SPENT ON COCOA INPUTS IN 2012/2013 SEGREGATED BY MEMBERSHIP (USD)

Characteristic	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total	
Amount spent on pesticides					
	Mean	49	69	57	t = -0.669 p = 0.506
	Standard Deviation	45	187	123	
	Valid N	40	27	67	
Amount spent on insecticides					
	Mean	49	27	42	t = 3.428 p = 0.001
	Standard Deviation	46	20	41	
	Valid N	70	34	104	
Amount spent on fertilizers					
	Mean	97	40	85	t = 3.398 p = 0.001
	Standard Deviation	108	24	99	
	Valid N	48	13	61	
Amount spent on small equipment					
	Mean	22	15	20	t = 3.248 p = 0.002
	Standard Deviation	27	10	24	
	Valid N	279	68	347	

5.2.2 Access to household assets

5.2.2.1 Household equipment. Close to 90 percent of both cooperative member and non-member households used or owned mobile phones and about 80 percent of both used or owned radios. About 45 percent of both types

of respondents used or owned motorbikes. There were no significant differences in type of household equipment owned or used between members and non-members (fig 16).

**FIGURE 16.** HOUSEHOLD EQUIPMENT, MEMBERS AND NON-MEMBERS

5.2.2.2 Construction material segregated by cooperative membership. Almost all houses in the communities (96.7 percent) were unit houses (more than one room); only about two percent of households also rented out single rooms or apartments. About 80 percent of the total sample owned a latrine (outhouse). Some 57 percent of houses

were constructed with earth or other local materials, but the houses of all non-members were plastered with cement (table 30). About 70 percent of members and 64 percent of non-members did not have electricity; however, the difference between the two groups was not significant.

TABLE 30. CONSTRUCTION MATERIAL USED BY HOUSEHOLDS, SEGREGATED BY COOPERATIVE MEMBERSHIP

Variable	Fairtrade membership			Test statistic
	Member N (%)	Non-member N (%)	Total sample N (%)	
Ownership and type of house				
Owned—single unit	9 (2.1)	2 (1.9)	11 (2)	$X^2 = 12.523$ $p = 0.006$
Owned—at least two units	423 (97.2)	97 (94.2)	520 (96.7)	
Owned—with extra rooms for rent	2 (0.5)	0 (0.0)	2 (0.4)	
Rented house	1 (0.2)	4 (3.9)	5 (0.9)	
Construction material of the outer walls				
Earth or other local materials	251 (63.7)	0 (0.0)	251 (57.7)	$X^2 = 61.749$ $p = 0.000$
Plastered with cement	143 (36.3)	41 (100)	184 (42.3)	
Construction material of the floor				
Earth	139 (32)	24 (23.3)	163 (30.3)	$X^2 = 3.24$ $p = 0.198$
Cement	295 (67.8)	79 (76.7)	374 (69.5)	
Tile	1 (0.2)	0 (0.0)	1 (0.2)	
Construction material of the roof				
Aluminium roofing sheet	335 (77.4)	90 (87.4)	425 (79.3)	$X^2 = 5.259$ $p = 0.072$
Makeshift/local material	96 (22.2)	13 (12.6)	109 (20.3)	
Brick	2 (0.5)	0 (0.0)	2 (0.4)	
Type of toilet facilities				
No toilet, use the bush	91 (21)	20 (19.6)	111 (20.7)	$X^2 = 6.992$ $p = 0.03$
Pit toilet with no walls or temporal material	275 (63.5)	55 (53.9)	330 (61.7)	
Closed pit toilet (with permanent walls)	67 (15.5)	27 (26.5)	94 (17.6)	
Do you have electricity?				
Yes	131 (30.1)	37 (35.9)	168 (31.2)	$X^2 = 1.308$ $p = 0.253$
No	304 (69.9)	66 (64.1)	370 (68.8)	

5.2.2.3 Sources of drinking water. The most common source of drinking water for both members and non-members was dug wells belonging either to the respondent or to a neighbour (fig 17). None of the respondents bought

drinking water (bottled), generally perceived to be cleaner and safer water for drinking than that from dug wells, which were often poorly managed and sometimes shallow, with water unfit for human consumption.

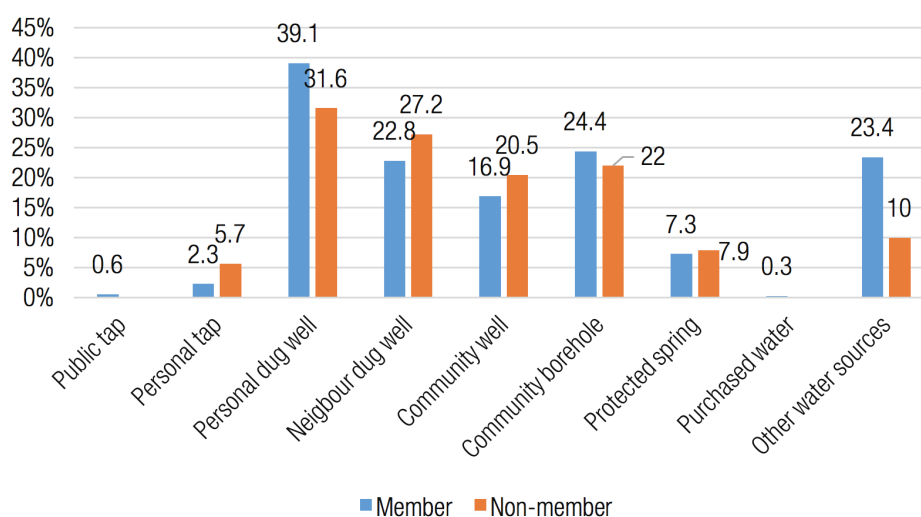


FIGURE 17. HOUSEHOLD SOURCES OF DRINKING WATER, MEMBERS AND NON-MEMBERS

Our reflection...

- The farming households have access to basic equipment for cocoa production (e.g. manual saws, axes, machetes). However, a relatively small percentage of farming households have access to motorized equipment that would save both time (use of motorized sprayers) and money (savings in hired labour).
- Most farming households do not use chemical inputs and fertilizer. Even the few who use inputs, do not apply them regularly. Only 35 percent of sampled households (members) who used fertilizer report using it on a regular basis. Average annual expenditures on inputs were XOF 24 000–48 500 (USD 48–97) for the 2012/2013 production season. This amount is small compared to the average size of land held by each household and thus insufficient to address issues of fertility, pest and diseases. Though members seem to spend more on inputs and use them more frequently than non-members, expected increases in production could be small compared to the costs of using the inputs.
- Ninety percent of the sampled cooperative members own a mobile phone and about 80 percent use radios. This opens the door to the possible use of mobile phone applications for monitoring and for facilitating improved communication between the cooperatives and their members.
- However, the sample shows limited access to assets that have major implications for household health, safety and overall well-being. For example, most of these households use dug wells as sources of drinking water and about 20 percent do not use latrines, posing health hazards not only to those households themselves but could lead to a general health crisis in the communities, such as cholera.
- Interestingly, despite significantly higher yields and larger farm sizes for members, household assets are not significantly different between members and non-members, suggesting that any difference in annual revenue between the two groups is not spent on household asset acquisition.

Summary: Physical capital—cocoa-producing households

Table 31 presents an overall assessment of the status of the physical capital of cocoa-producing households,

the justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 31. SUMMARY—PHYSICAL CAPITAL HELD BY COCOA-PRODUCING HOUSEHOLDS

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
4.1. Tools and equipment for cocoa production	Yellow	Only about, 40 percent use manual spraying machines, 11 percent motorized spraying machines, eight percent modern pruning equipment.	<ul style="list-style-type: none"> Much has to be done to increase farmers' accumulation or access to equipment for cocoa production, especially modern pruning equipment and motorized spraying machines.
4.2. Access to inputs, perception of access to inputs: sufficient for needs, limited by supply restrictions, limited by insufficient income	Yellow	Only about 21 percent of members use pesticides and about 41 percent use insecticides. The few that do, failed to apply these inputs regularly.	<ul style="list-style-type: none"> Identify ways to increase farmer access to inputs to improve productivity, especially fertilizers (organic and inorganic).
4.3. Household equipment, access to potable water, electricity, communication and other basic infrastructure	Yellow	<p>About 90 percent of households use mobile phones.</p> <p>However, access to basic assets for human well-being is low: 20 percent do not have/use toilets, which poses a threat to public hygiene and health. Wells are the most common source of drinking water for about 70 percent of respondents. Only 31 percent have access to electricity.</p> <p>There is no significant difference between members and non-members.</p>	<ul style="list-style-type: none"> Use of mobile phone to communicate important agricultural information and to facilitate communication between cooperative and its members. The high use of mobile phones could also be an advantage for monitoring of cooperative performance and of Fairtrade in general.

* *Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives*

5.3 Financial capital—farming households

5.3.1 Income sources for household members

Average annual revenue from cocoa for member and non-member households together was estimated at about USD 3160. Member households had significantly higher revenues from cocoa, about USD 3292, than non-member households, USD 2424. The production and yields of members were comparatively higher than those of non-members (table 32). The value was calculated by multiplying

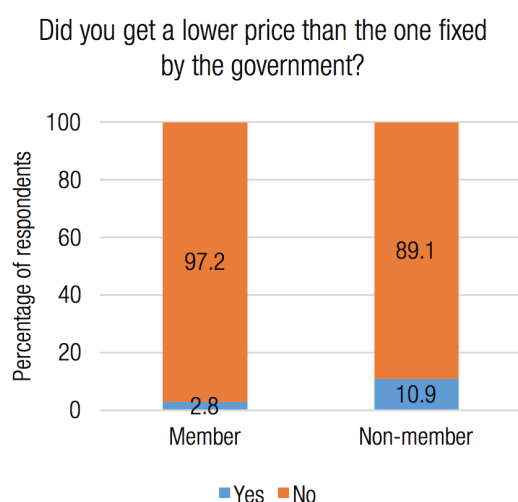
total production per farmer for 2012/2013 by the producer prices for that year (USD 1.45 per kilogram). Income from cocoa represented 73.64 percent of the total income of the respondents. Although members had significantly higher annual revenues from cocoa than non-members, the amount represented an almost equal proportion (73 percent) of the total household revenue of both (table 32).

TABLE 32. COCOA REVENUES SEGREGATED BY COOPERATIVE MEMBERSHIP FOR 2012/2013 SEASON (USD)

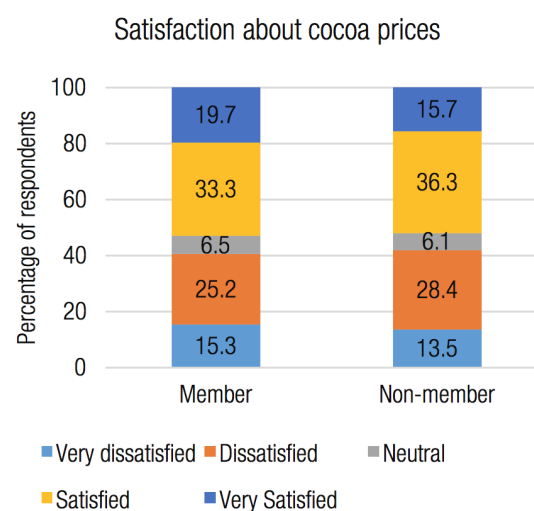
Variable	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total	
Cocoa income					
	Mean	3292	2424	3160	t = 2.199 p = 0.028
	Standard Deviation	3208	2958	3185	
	Valid N	424	76	500	
Proportion of income from cocoa (%)					
	Mean	73.75	73.12	73.64	t=0.29 p=0.772
	Standard Deviation	18.23	17.11	18.04	
	Valid N	432	85	517	
	Minimum	5	25	5	
	Maximum	100	100	100	

About 97 percent of members and 89 percent of non-members reported never having received lower prices for their cocoa in any year than what was authorized by the CCC (fig 18). However, close to 40 percent of both members and non-members declared that they are either dissatisfied or very dissatisfied with the prices they received (fig 19). The general perception of this category of producers

was that cocoa prices were low compared to the efforts they put in. Farm-gate prices reported by the cooperatives revealed that they bought cocoa from producers at the prices fixed by the State; for the 2012/2013 production season, this was USD 1.45 kg⁻¹. The cooperatives did not report paying different prices to members and non-members.

**FIGURE 18.** PRICES RECEIVED BY RESPONDENTS

In addition to revenue generated from the minimum farm-gate prices of cocoa, Fairtrade cooperative members may also have generated additional revenue from different certification schemes. Cooperative members explained that by adhering to double or triple certification schemes, it

**FIGURE 19.** SATISFACTION WITH COCOA PRICES

was possible that every cooperative member could benefit from a certification scheme, since different farmers were registered with different certification schemes. However, markets for certified products were not always available.

5.3.2 Main sources of income

About 64 percent of household members from both member and non-member households did not have any formal source of income (fig 20); it should be noted that this proportion of non-income earners included children and youths in the sampled households. Cocoa production was

the most important source of income for nearly 24 percent of all household members. Other agricultural activities were the main sources of income for close to seven percent of both cooperative member and non-member households. Wage labour was almost absent as a source of income for cocoa households.

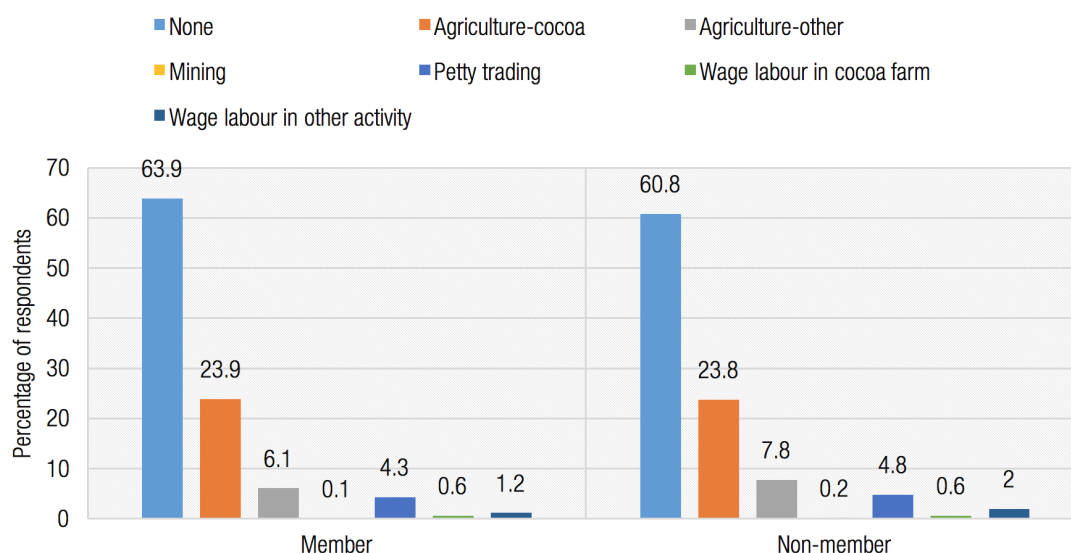


FIGURE 20. MAIN SOURCES OF INCOME FOR HOUSEHOLDS, MEMBERS AND NON-MEMBERS

About 57 percent and 22 percent of member and non-member households, respectively, cited other food and tree crops as the most important sources of income other than cocoa (table 33). Food crops were ranked first by almost

68 percent of the respondents and other tree crops by 20 percent. Paid labour was not mentioned as an alternative source of income in any of the areas.

TABLE 33. OTHER SOURCES OF INCOME RANKED IN ORDER OF IMPORTANCE, COOPERATIVE MEMBERS ONLY

Rank	1st N (%)	2nd N (%)	3rd N (%)	Total
Mining	3 (0.68)	3 (2.56)	2 (10.53)	8 (1.38)
Others	15 (3.39)	5 (4.27)	1 (5.26)	21 (3.63)
Food crops	300 (67.87)	32 (33.33)	0 (0.0)	332 (57.44)
Tree crops	89 (20.14)	39 (33.33)	2 (10.53)	130 (22.49)
Livestock	13 (2.94)	19 (16.24)	14 (73.68)	46 (7.96)
Remittances	1 (0.23)	0 (0.0)	0 (0.0)	1 (0.17)
Pension	1 (0.23)	1 (0.85)	0 (0.0)	2 (0.35)
Small business	20 (4.52)	18 (15.38)	0 (0.0)	38 (6.57)
Grand total	442 (100)	117 (100)	19 (100)	578 (100)

Table 34 reports the proportions of income coming from sources other than cocoa. For example, respondents who ranked food crops as the first other income source derived about 22 percent of their incomes from the activity. While only 0.3 percent ranked remittances as an important source

of income, it contributed about 80 percent to their annual revenues. Other tree crops contributed up to 30 percent of the 2013 revenue for the 89 respondents who ranked the activity as the first alternative source of income.

TABLE 34. PERCENTAGE OF REVENUE GENERATED BY MEMBERS' OTHER INCOME-GENERATING ACTIVITIES, 2013

Rank	1 (%)	2 (%)	3 (%)	Total (%)
Other sources of income				
Mining	36.67 (N=3)	15.67(N=3)	7.50(N=2)	21.50(N=8)
Others	28.71(N=15)	15.00(N=5)	5.00(N=1)	24.58(N=21)
Food crops	22.17(N=300)	13.59(N=32)		21.32(N=332)
Tree crops	30.19(N=89)	24.44(N=39)	15.00(N=2)	28.25(N=130)
Livestock	21.23(N=13)	11.18(N=19)	9.71(N=14)	13.68(N=46)
Remittances	80.00(N=1)			80.00 (N=1)
Pension	15.00(N=1)	10.00(N=1)		12.50 (N=2)
Small business	32.15(N=20)	20.39(N=18)		26.58 (N=38)

5.3.3 Access to loans and savings

Figure 21 describes respondents' sources of loans and saving destinations in the 2012/2013 cocoa production season. Even though all the cooperatives reported to have given out loans to members, survey results show that only 15 percent of members and almost eight percent of non-members had sometimes or most of the time received loans from the cooperatives in the form of cash. This suggests that the service has yet to reach most of the cooperative members. Similarly, an almost equal proportion had never received loans in the form of inputs from traders. However, a few (five percent for members and four percent from non-members) had received loans in the form of inputs from the cooperative. Since cooperatives buy and sell cocoa, they may also give out loans to non-members in order to secure supply from them.

Almost 29 percent of both members and non-members reported having saved some money in 2013 for inputs and small equipment. More non-members than members reported having saved money for inputs. The most important saving destinations listed by members were commercial banks (32 percent), followed by telephone networks-mobile money (23.6 percent). Mobile money refers to banking services offered by telephone networks.

The average amount of loans received by respondents is reported in table 35, together with the interest rates. Amounts received as loans varied from XOF 10 000 to XOF 500 000 (USD 20-1000) Average interest rates varied from 0 to 4 percent per month, depending on the source.

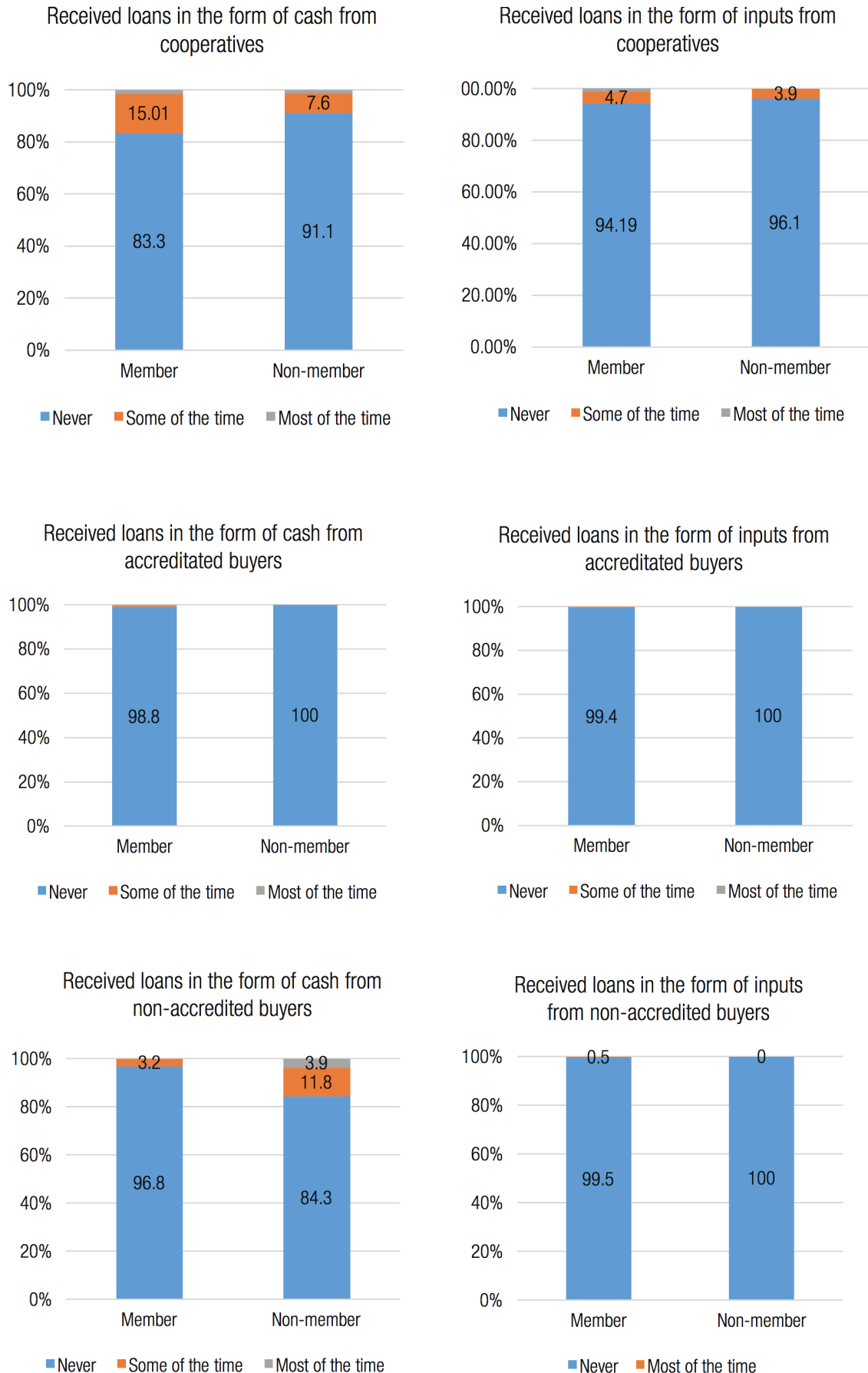

FIGURE 21. SOURCES OF LOANS FOR COCOA-PRODUCING HOUSEHOLDS, MEMBERS AND NON-MEMBERS

TABLE 35. AMOUNT AND INTEREST RATES OF LOANS CONTRACTED BY RESPONDENTS, SEGREGATED BY COOPERATIVE MEMBERSHIP

Variable	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total	
Interest rate (%) of loan received from cooperative					
	Mean	0.09	0	0.08	t = 0.465 p = 0.643
	Standard Deviation	0.52	0	0.5	
	Maximum	4	0	4	
	Minimum	0	0	0	
	Valid N	76	7	83	
Amount of the last loan received from any lender (USD)					
	Mean	184	205	192	t = -0.393 p = 0.696
	Standard Deviation	222	175	204	
	Maximum	1000	600	1000	
	Minimum	20	20	20	
	Valid N	38	22	60	
Interest rate of the last loan received in 2012/2013 production season (%)					
	Mean	13.24	24.12	16.86	t = -1.03 p = 0.307
	Standard Deviation	33.28	39.7	35.52	
	Maximum	100	100	100	
	Minimum	0	0	0	
	Valid N	34	17	51	

Summary: Financial capital—cocoa-producing households

Table 36 presents an overall assessment of the status of financial capital of cocoa-producing households,

the justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 36. SUMMARY—FINANCIAL CAPITAL HELD BY COCOA-PRODUCING HOUSEHOLDS

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
5.1. Gross income from cocoa sales	Green	Cocoa contributes up to 74 percent, a large portion of respondents' revenues.	<ul style="list-style-type: none"> It is important to monitor how this proportion will change with farmers' involvement in Fairtrade and improved agricultural practices, including access to inputs that have been promised by the cooperatives.
5.2. Cocoa prices and satisfaction with cocoa prices	Yellow	<p>Some 97 percent of respondents have never received prices lower than the fixed price set by CCC.</p> <p>About 40 percent of respondents are not satisfied with the prices because they are not felt to be commensurate with efforts.</p>	<ul style="list-style-type: none"> Perception of farmers' satisfaction with prices needs to be continuously monitored.
5.3. Income from other sources	Yellow	Other food crops and tree crops are other important sources of income.	<ul style="list-style-type: none"> Efforts to diversify sources of income should continue, especially from other agricultural commodities.
5.4. Loans, sources, interests rates	Red	Farmers generally do not have access to loans. Only a very limited number receive loans from cooperatives.	<ul style="list-style-type: none"> Efforts should be made to improve access to loans by both microfinance institutions and formal banks. Efforts should be made by cooperatives to provide loans to members and effective amounts distributed by cooperatives to members.

* *Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives*

5.4 Human capital—farming households

5.4.1 Household composition and access to education

Of the total sample of 436 members and 103 non-members, average household sizes were 7.86 (+/- 3.75) and 6.41(+/- 3.71), respectively. About half (51 percent) of the people in the member and non-member households were females (fig 22). About 60 percent were younger than 20 years; only 1.4 percent were more than 60 years old. There were no major differences in age composition between member and non-member households.

Though the findings showed a youthful population, the question was how many of the youths would take up cocoa production. Focus-group discussions suggested that most parents would like their children to find jobs other than in cocoa cultivation. For many parents, only those children that could not excel in school (or did not have the possibility to attend school) were encouraged to take over their cocoa farms.

The education system in the country is structured as follows: primary education, six years; junior secondary, four years; and senior secondary, three years. Most of those who had attended school had only attained the primary level. It is not known whether this category actually completed primary education, but other studies show that 62 percent of children in Côte d'Ivoire from 15 to 24 years of age have not completed primary education (EPDC 2014).

About 49 percent of member household (adults, youths and children) had never been to school. Comparatively more persons from non-member households (51 percent) fell into this category, as shown in figure 23.

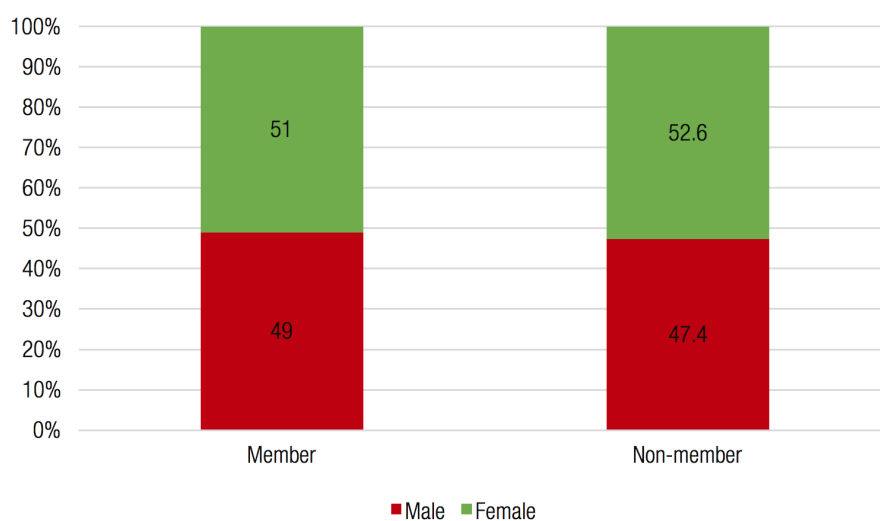


FIGURE 22. GENDER OF HOUSEHOLD MEMBERS, MEMBERS AND NON-MEMBERS

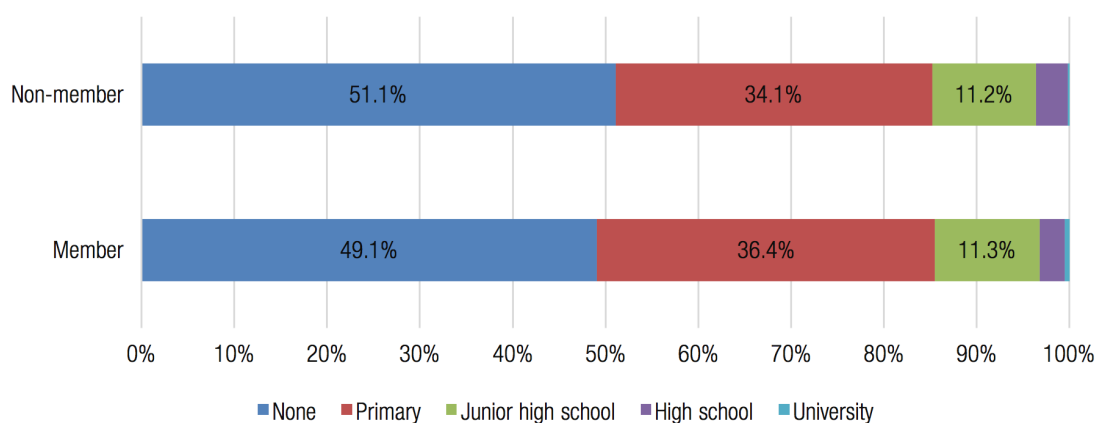


FIGURE 23. EDUCATIONAL LEVEL OF HOUSEHOLD MEMBERS, MEMBERS AND NON-MEMBERS

5.4.2 Members' access to training

Relatively few cooperative members (less than 10 percent) had participated in any training before joining the cooperatives. The trainings with the highest number of

participation were related to good agricultural practices and farm management—6.7 percent each (fig 24).

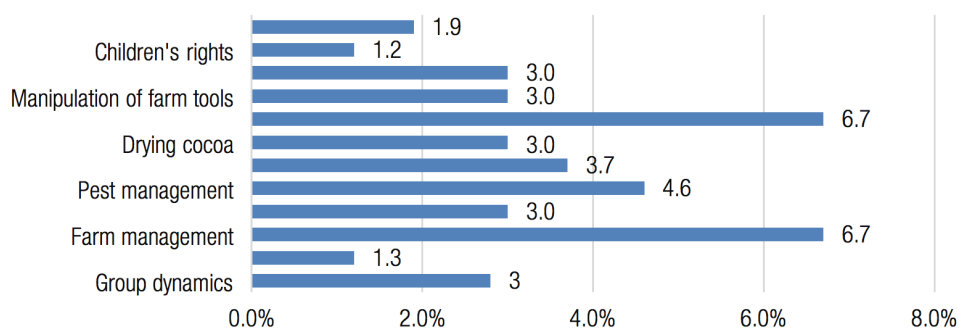


FIGURE 24. PERCENTAGE OF MEMBERS HAVING RECEIVED TRAINING PRIOR TO JOINING THE COOPERATIVE

After joining the cooperatives, members' participation in different trainings ranged from a low of about 13.1 percent to a high of 63.8 percent (fig 25) and increased dramatically across all subject areas. For example, three percent of members had received training on child protection prior to joining the cooperative, increasing to 46.5 percent after

joining, whereas only 27 percent of non-members had ever received such training (fig 26). For both members and non-members, much of the training they claimed to have received was aimed at increasing cocoa production, productivity and quality.

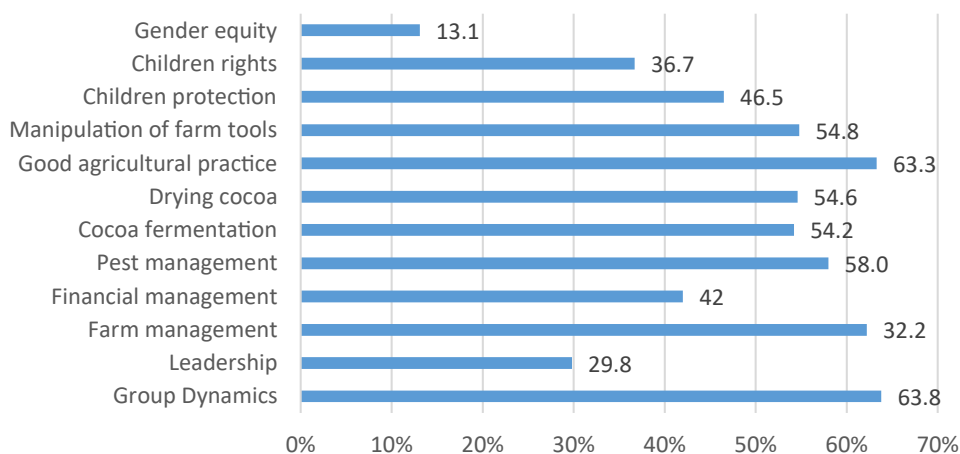


FIGURE 25. PERCENTAGE OF MEMBERS HAVING RECEIVED TRAINING AFTER JOINING THE COOPERATIVE

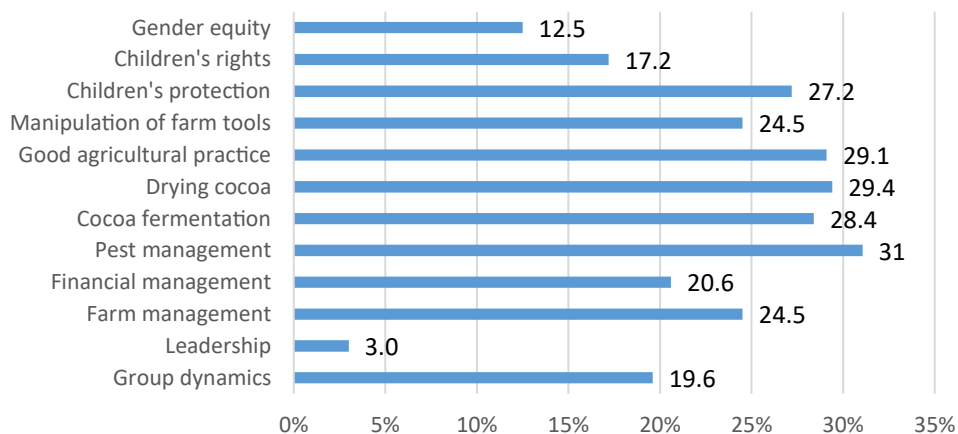


FIGURE 26. PERCENTAGE OF NON-MEMBER RESPONDENTS HAVING RECEIVED TRAINING BY 2014

5.4.3 Number and type of household members working on cocoa farms

Respondents were asked which household members work on cocoa farms and their level of participation. Data indicated that 63.8 percent of household members in member and 64.5 percent in non-member households do

not work in cocoa farms (fig 27). The level of participation showed no major difference between members and non-members. At least 30 percent of household members of all age categories worked either occasionally or year-round in cocoa farms (fig 28). However, the nature of these jobs was not specified in the data.

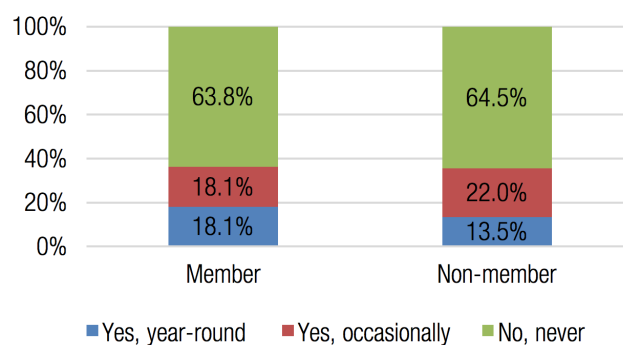


FIGURE 27. PERCENTAGE OF HOUSEHOLD MEMBERS WORKING ON COCOA FARMS

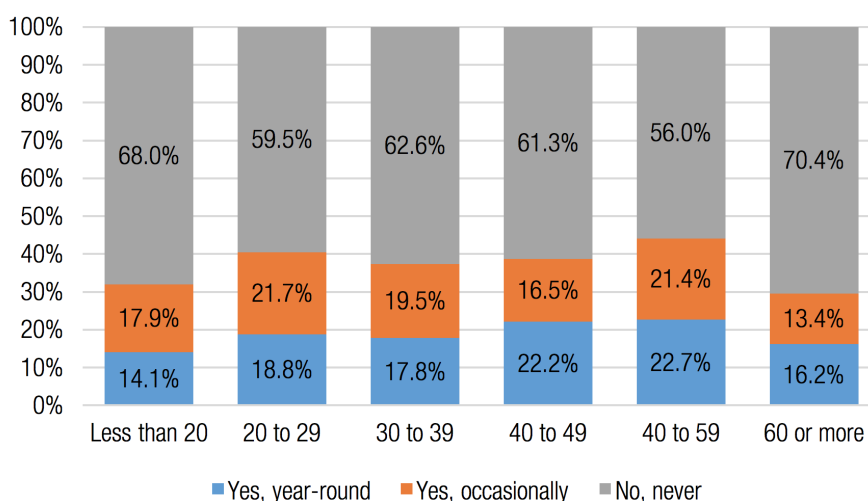


FIGURE 28. LEVEL OF PARTICIPATION OF COOPERATIVE HOUSEHOLD MEMBERS IN COCOA ACTIVITIES, BY AGE

5.4.3.1 Contribution of household labour to different cocoa activities. Respondents were asked whether and how the different household members worked in various cocoa activities. Their level of participation was displayed on five-point Likert scales—see figures 29, 30 and 31. In general, the figures suggest that women did not participate as much as men in cocoa activities and that men also avoided hazardous activities like input application. For example, results showed that most women in both member and non-

member households did not participate in land preparation and planting, and less than two percent applied inputs. Also, a lower proportion of men applied inputs (23–39 percent) compared with participation in the other farming activities (23–80 percent). The relatively higher proportion of non-member participation in input application (31.3 percent) in comparison with member participation (20.5 percent) could be because cooperatives have designated and trained persons to apply inputs on their members' farms.

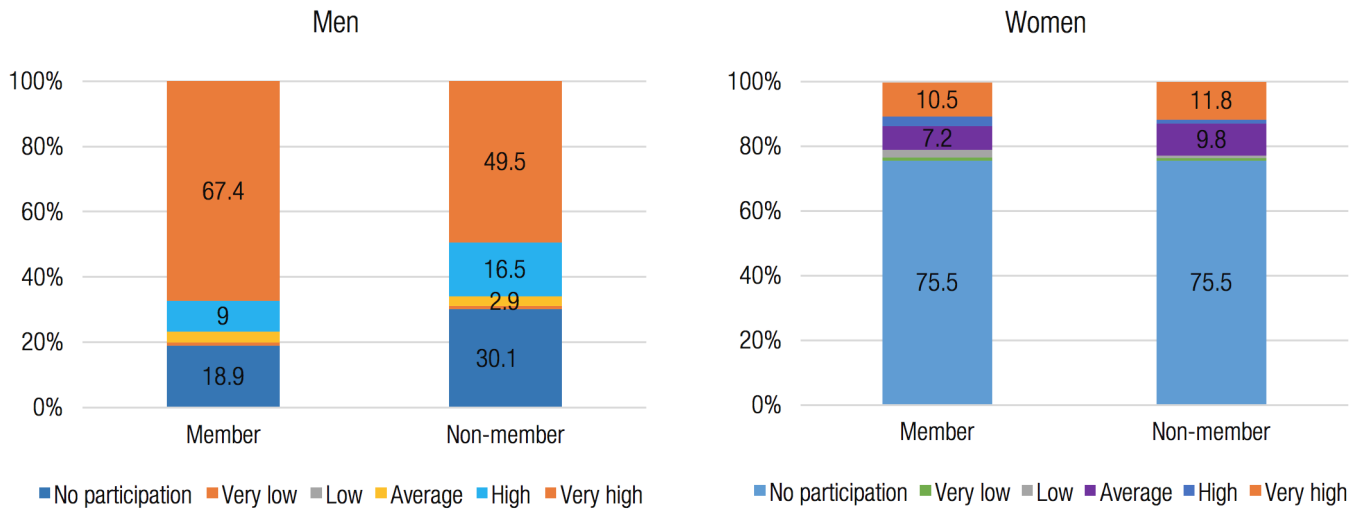


FIGURE 29. LEVEL OF PARTICIPATION OF MEN AND WOMEN IN LAND PREPARATION, MEMBERS AND NON-MEMBERS

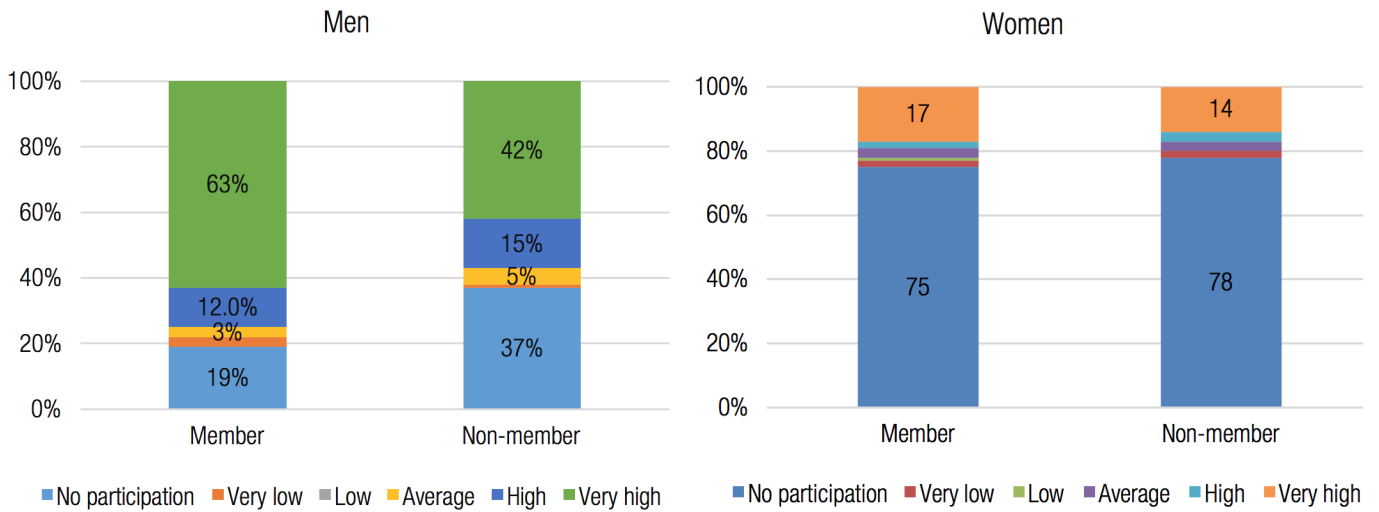


FIGURE 30. LEVEL OF PARTICIPATION OF MEN AND WOMEN IN PLANTING, MEMBERS AND NON-MEMBERS

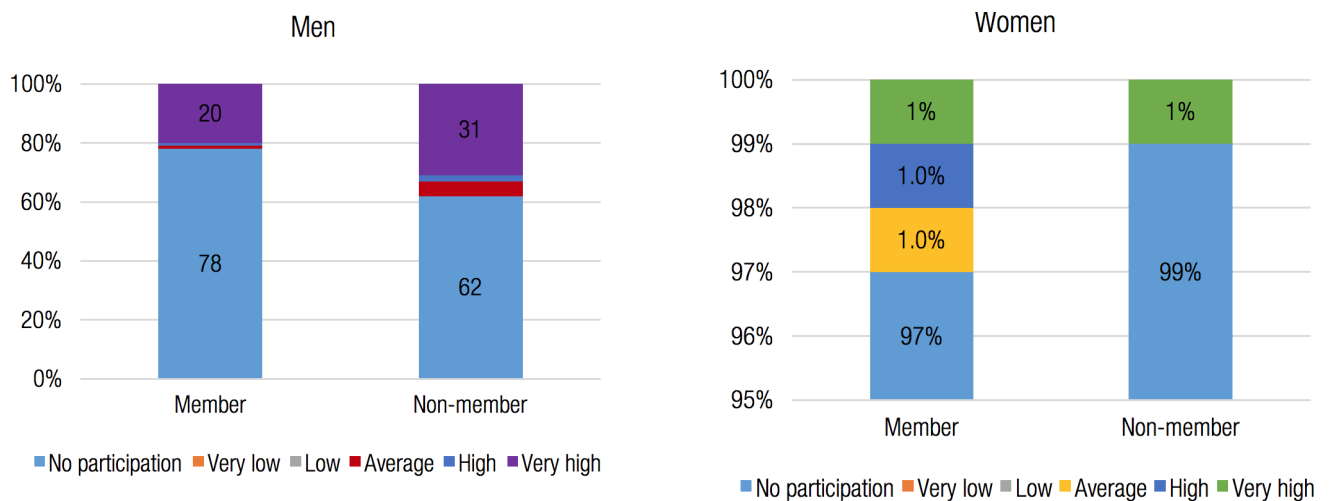


FIGURE 31. LEVEL OF PARTICIPATION OF MEN AND WOMEN IN INPUT APPLICATION, MEMBERS AND NON-MEMBERS

5.4.3.2 Use of hired labour. The most common activities for which respondents used hired labour in 2013 were land preparation, planting and harvesting (fig 32). A significant higher proportion of members (63.3 percent) used hired labour in 2013 for land preparation, compared with non-

members (31.4 percent). All respondents from both member and non-member households used hired labour to plant their cocoa fields, a laborious work that involves pegging and digging.

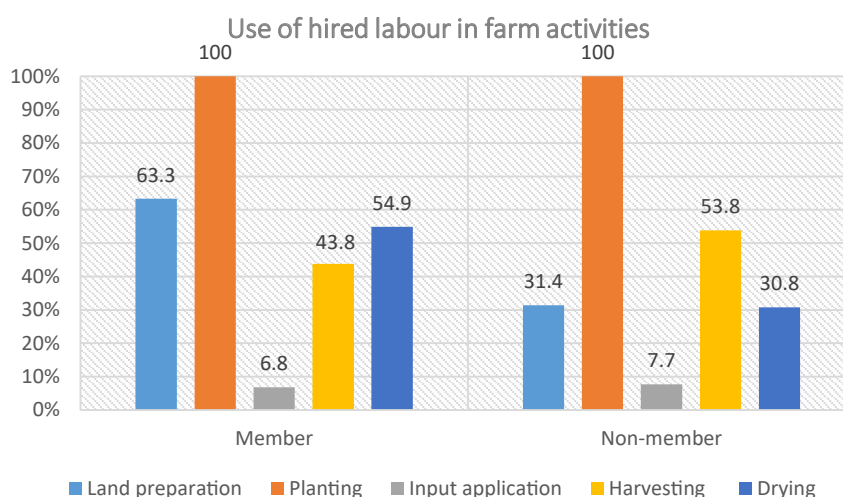


FIGURE 32. PERCENTAGE OF RESPONDENTS USING HIRED LABOUR FOR DIFFERENT ACTIVITIES

5.4.3.3 Cost of hired labour. Average amounts spent on hired labour for different farming activities are presented in table 37. Members spent considerable money on land preparation, including clearing of farmland. Cooperative members spent about twice as much as non-members, with several possible reasons: (1) they possibly contracted

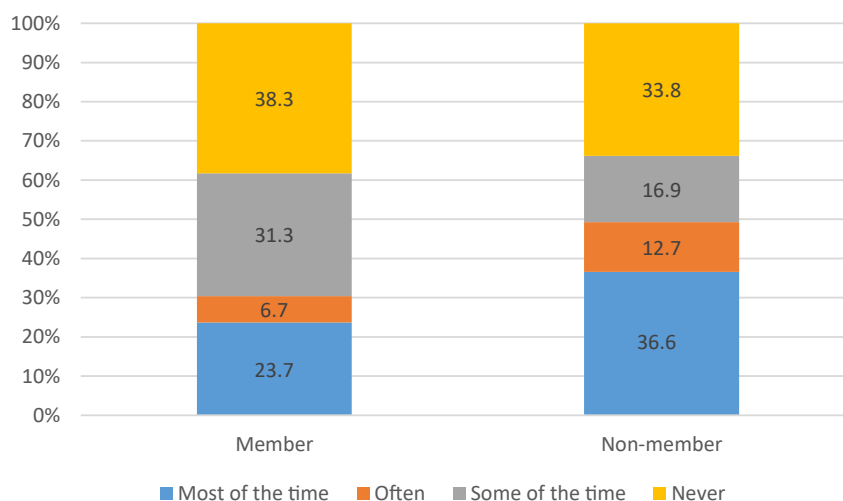
out more land-preparation jobs than did non-members, (2) the trainings they had received focused on the importance of good farm management and may have led to more investment in it, and (3) they had more income and could afford to pay.

TABLE 37. COST OF HIRED LABOUR FOR DIFFERENT FARMING ACTIVITIES (USD PER DAY)

Characteristic	Statistic	Fairtrade membership			Test statistic
		Member	Non-member	Total	
Cost of hired labour for land preparation (USD/year)					
	Mean	244	122	219	t = 3.668 p = 0.00
	Standard Deviation	246	116	230	
	Valid N	101	26	127	
Cost of hired labour for planting (USD/year)					
	Mean	171	146	168	t = 0.383 p = 0.704
	Standard Deviation	134	158	135	
	Valid N	30	5	35	
Cost of hired labour for harvesting (USD/year)					
	Mean	243	166	236	t = 0.566 p = 0.574
	Standard Deviation	298	172	289	
	Valid N	50	5	55	
Cost of hired labour for drying (USD/year)					
	Mean	185	150	180	t = 0.515 p = 0.609
	Standard Deviation	150	158	149	
	Valid N	35	6	41	

5.4.3.4 Worker safety and access to health services. One of the variables assessing worker safety—use of protective equipment—is reported in figure 33. A significantly higher number of non-members than members used protective equipment in 2013 when applying inputs ($X^2 = 10.836$, $p = 0.013$). This seems strange, since one would expect

that cooperative members would generally use protective equipment as a result of different training programs related to worker safety. However, as previously mentioned, it could also be that since the cooperatives provide trained sprayer teams to all their members, fewer members spray their own farms.

**FIGURE 33.** PERCENTAGE AND FREQUENCY OF RESPONDENTS USING PROTECTIVE EQUIPMENT

Farmers generally did not have access to health insurance and we did not find any policy on health insurance, such as exists in Ghana. Only 1.3 percent of the members and zero for non-members declared having access to any insurance scheme. For both members and non-members,

an average of 38.5 and 34.3 percent respectively of their household members get sick either often or most of the time, a bit higher in member households than non-member households (fig 34).

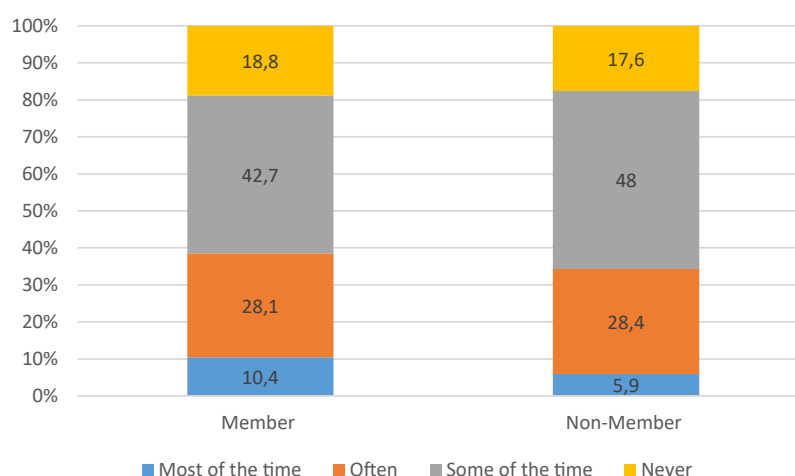


FIGURE 34. PERCENTAGE AND FREQUENCY OF HOUSEHOLD MEMBERS GETTING SICK

Summary: Human capital—cocoa-producing households

Table 38 presents an overall assessment of the status of human capital of cocoa-producing households,

the justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 38. SUMMARY—HUMAN CAPITAL HELD BY COCOA-PRODUCING HOUSEHOLDS

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
4.1. Children of cocoa-producing households attending school, by gender and age	Red	Population is youthful but probability of children taking over their parents' farm is low. This poses a considerable risk to the viability of the cocoa sector in the future.	<ul style="list-style-type: none"> Further monitoring is needed on the number of youths who take over their parents' farms or who even work with their parents and own farms of their own. Cooperatives need to identify a way to encourage youths to be more actively engaged in both cocoa farming and participation in the cooperatives.
4.2. Contribution of household members to cocoa production	Yellow	Youths, women and men are reported to have participated in cocoa production. Generally more men than women do most of the physical/risky jobs and land preparation.	<ul style="list-style-type: none"> Cooperatives need to identify ways to reach women and young adults who take part in the production of cocoa but who are not members of the cooperative.
4.3. Contribution of seasonal and year-round hired labour	Yellow	Hired labour is mostly required for physical activities, specifically land preparation and application of inputs.	
4.4. Use of protective equipment	Yellow	Percentage of households not using protective equipment may be considered high (37 percent) for both members and non-members.	<ul style="list-style-type: none"> There is a need to continue to monitor the use of protective equipment.

* Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives.

5.5 Social capital—farming households

5.5.1 Knowledge of Fairtrade and the Fairtrade Premium

Respondents were asked to explain what they understood by Fairtrade certification. The open answers provided were classified into four groups: no idea, little or wrong knowledge; fair knowledge and good knowledge. Examples of little or no knowledge about Fairtrade included: “organization that helps cocoa farmers in their business and supplies them with inputs and chemicals”; “organization that seeks welfare of farmers”; “farmer cooperative”; “organization that helps farmers to have high productivity for cocoa”; and “organization that teaches farmers the best way to improve productivity.” Examples of fair knowledge included: “they are our cocoa partners for fair and honest trade”; “organization that helps farmers produce cocoa and trade with transparency”; “organization that gives Premiums to cocoa farmers”; “certification that helps farmers improve their yields”; and “trading that does not cheat.” A farmer’s response was classified as good knowledge if it included the following elements in the same definition: transparency, Premiums, fair and honesty.

A very high proportion of both members (77.7 percent) and non-members (89.2 percent) had no idea what Fairtrade was (fig 35). Chi square statistics showed that members were significantly more informed about Fairtrade than non-members ($\chi^2 = 9.698$; $p = 0.021$). The proportion of members, who could not explain Fairtrade was surprisingly high compared with examples in Ghana. This may be related to the fact that in Ghana, most of the cooperatives were created within the framework of the Cocoa Life Project and with the objectives of joining Fairtrade. However, in

Côte d’Ivoire, the cooperatives had existed for some time before they were introduced to Fairtrade. Additionally, the multicertification schemes in Côte d’Ivoire make it harder for Fairtrade to stand out. This may imply that cooperative members have not been sufficiently schooled about the concept. Another factor could be that two of the cooperatives had not yet benefited from Fairtrade sales and associated Fairtrade Premium.

As for the Fairtrade Premium, most cooperative members (61.5 percent) responded that they knew what the Fairtrade Premium is in terms of goals and purpose, but few could actually explain it, as reflected by their responses in figure 36. Most of those who provided explanation perceived the Fairtrade Premium as gifts, bonuses or awards for either selling or participating in cocoa activities through the cooperatives. Some of the responses were, however, strange—that “a Premium was the price of a bag of cocoa,” “a gift from the white man,” etc. No significant differences were found between male and female cooperative members concerning their understanding of the Fairtrade Premium.

For the three cooperatives that have received Fairtrade Premium, 61 percent of their respondents said that they were not aware of projects funded by the Fairtrade Premium. About 48.2 percent declared that they did not contribute to decision making about how the Fairtrade Premium was used (table 39). A contributing factor could be that use of the Fairtrade Premium was decided by each cooperative’s Fairtrade Premium Committee. Even so, most respondents who had received some Fairtrade Premium (79 percent) were either satisfied or very satisfied with the amounts received. There were significant differences in the above responses among cooperatives.

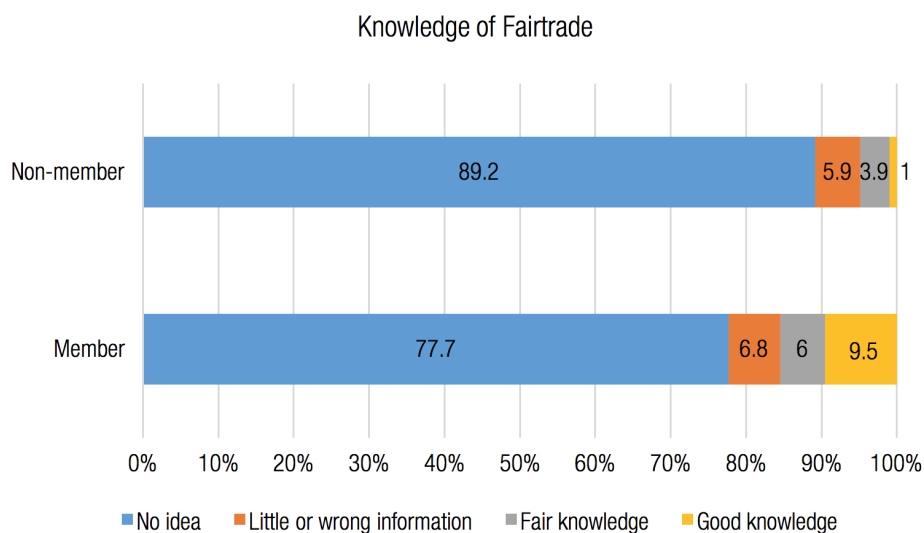


FIGURE 35. RESPONDENTS’ SELF-REPORTED KNOWLEDGE OF FAIRTRADE

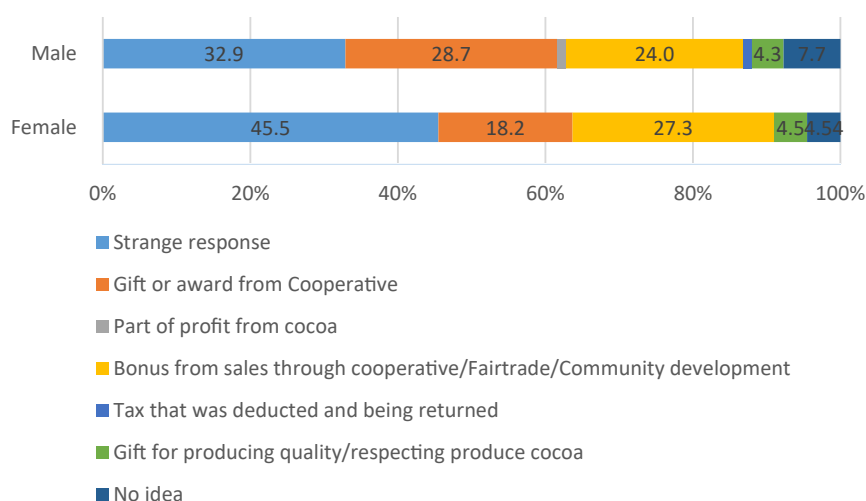


FIGURE 36: SELF-REPORTED KNOWLEDGE OF FAIRTRADE PREMIUM BY GENDER, MEMBERS ONLY

TABLE 39: SELF-REPORTED KNOWLEDGE OF FAIRTRADE PREMIUM FOR COOPERATIVES HAVING RECEIVED FAIRTRADE PREMIUM

	Coop1	Coop2	Coop3	Coop4	Coop5	Total	Test statistic
	N(%)	N(%)	N(%)	N(%)	N(%)	N(%)	
Do you know what the Fairtrade Premium is?							
Yes	49 (57.6)	55 (67.1)	43 (68.3)	39 (54.2)	44 (59.5)	230 (61.2)	$X^2 = 5.556$ $p = 0.336$
No	36 (42.4)	27 (32.9)	20 (31.7)	33 (45.8)	30 (40.5)	146 (38.8)	
Total	85 (100)	82 (100)	63 (100)	72 (100)	74 (100)	376 (100)	
Do you know which projects are funded with the Fairtrade Premium?							
Yes	33 (39.28)	N/A	N/A	29 (41.42)	26 (35.61)	88 (38.76)	$X^2 = 52.92$ $p = 0.000$
No	51 (60.71)	N/A	N/A	41 (58.57)	47 (64.38)	139 (61.23)	
Total	84 (100)	N/A	N/A	70 (100)	73 (100)	227 (100)	
How much do you contribute to the decision about how the Fairtrade Premium is used?							
High contribution	20 (22.2)	N/A	N/A	4 (4.4)	20 (21.1)	44 (15.9)	$X^2 = 27.94$ $p = 0.000$
Some contribution	24 (26.7)	N/A	N/A	17 (18.7)	35 (36.8)	76 (27.5)	
Neutral	6 (6.7)	N/A	N/A	10 (11.0)	7 (7.4)	23 (8.3)	
No contribution	40 (44.4)	N/A	N/A	60 (65.9)	33 (34.7)	133 (48.2)	
Total	90 (100)	N/A	N/A	91 (100)	95 (100)	276 (100)	
Are you satisfied with the amount of Fairtrade Premium you receive?							
Very satisfied	41 (48.8)	N/A	N/A	2 (7.1)	43 (51.8)	86 (44.1)	$X^2 = 143.79$ $p = 0.000$
Satisfied	33 (39.3)	N/A	N/A	2 (7.1)	33 (39.8)	68 (34.9)	
Neutral	0 (0.0)	N/A	N/A	21 (75.0)	0 (0.0)	21 (10.8)	
Dissatisfied	7 (8.3)	N/A	N/A	2 (7.1)	6 (7.2)	15 (7.7)	
Very dissatisfied	3 (3.6)	N/A	N/A	1 (3.6)	1 (1.2)	5 (2.6)	
Total	84 (100)	N/A	N/A	28 (100)	83 (100)	195 (100)	

N/A applies to coops that have not yet received Fairtrade Premium.

5.5.2 Respondents' perception of trust

Respondents were asked to assess their level of trust in different stakeholders, including cooperative members, Fairtrade and other organizations that work closely with them (see results in appendix 1). The results were segregated per cooperative. As mentioned earlier, two of the cooperatives had not received any Fairtrade Premium, while three had benefited from the Fairtrade Premium.

Most of the respondents (75 percent) trusted community members and this could explain why they associated with them in the cooperatives. There were significant differences between the cooperatives with regards to trust in Fairtrade, but the results do not seem to show that trust was influenced by having received the Fairtrade Premium—the two cooperatives that had not received the Premium reported higher or almost equal levels of trust in Fairtrade as those that had. This suggests that the Premium may not be the most important reason for joining Fairtrade. Reasons for low trust will need further examination in any future data collection.

A very high proportion of the respondents (87 percent) trusted their cooperative leaders who work in the cooperative headquarters. An almost equal proportion trusted staff members at the level of the sections. Significant differences in trust of leadership, however, appeared among the cooperatives. Results also show that most cooperatives members (78 percent) trusted government extension staff, which could be related to ANADER's extension work in the cocoa sector in Côte d'Ivoire. Fairtrade can capitalize on the experience of ANADER to carry out most of its community mobilization and training programs for would-be and newly certified cooperatives.

Summary: Social capital—cocoa-producing households

Table 40 presents an overall assessment of the status of social capital of cocoa-producing households, the justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 40. SUMMARY—SOCIAL CAPITAL HELD BY COCOA-PRODUCING HOUSEHOLDS

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
5.1. Knowledge of Fairtrade and Fairtrade Premium	Red	Almost 78 percent of cooperative members cannot provide a good explanation of Fairtrade and only a few, an explanation of the Fairtrade Premium. Close to half of members of the cooperatives that have received Fairtrade Premium say that they do not help make decisions about the use of the Fairtrade Premium.	Fairtrade could support cooperatives in increased sensitization among communities on Fairtrade principles and practices. Identify initiatives to increase the number of members who take part in decision making about use of the Fairtrade Premium.
5.2. Respondents' perception of trust	Yellow	Results show some or high level of trust in buyers, high level of trust among members, high level of trust in government extension system and high level of trust in cooperative management. Only a small proportion of members, however, 33 percent, openly declare they trust or highly trust Fairtrade.	Explore the reasons for the low levels of trust, especially in Fairtrade, and identify ways to improve trust in Fairtrade.

* *Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives*

5.6 Shocks, resilience and vulnerability

Shocks, resilience and vulnerability were assessed by asking respondents if they had sold part or all of their assets to meet urgent family needs. To a general question, more

members, close to 15 percent, than non-members, 1.4 percent, reported that sometimes or most of the time they had sold physical assets to meet urgent family needs (fig 37). When specific needs were stated in the questions, more non-members than members reported having sold

some assets, such as livestock, to meet family health and educational needs.

Other questions were focused on the emergence of pests and diseases and how farmers responded to them. The black pod disease and the swollen shoot virus were the diseases most commonly cited by both members and non-members (fig 38). More members (33.4 percent) than non-members (26.1 percent) described the problems occurring on their farms to be minor. This means that more non-

members perceived the problems to be either a noticeable, significant, major or total loss.

The most common solution used by farmers to solve pest and disease problems was the application of chemical inputs. More non-members (90.6 percent) than members (85.6 percent) applied chemical inputs. Affected trees were cut down by members in about 6.6 percent of the cases; 5.1 percent, by non-members. The latter group were probably those who had issues of viruses.

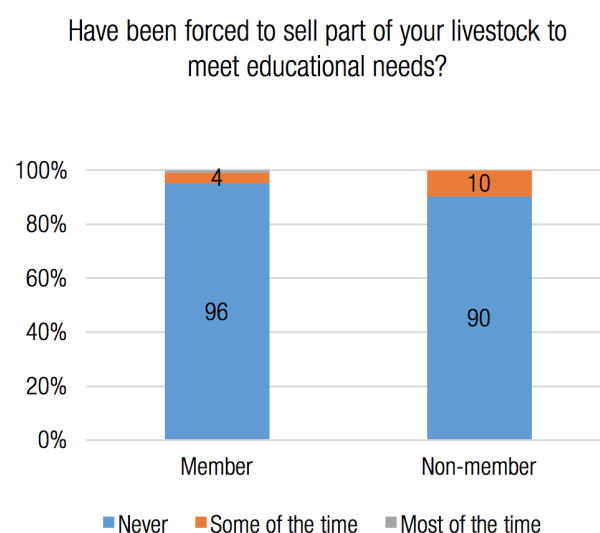
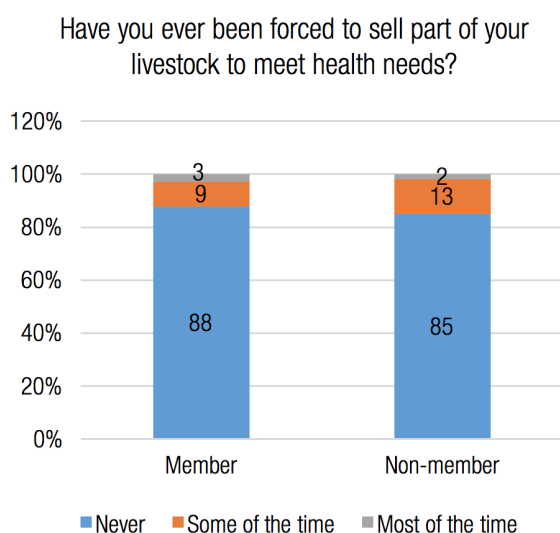
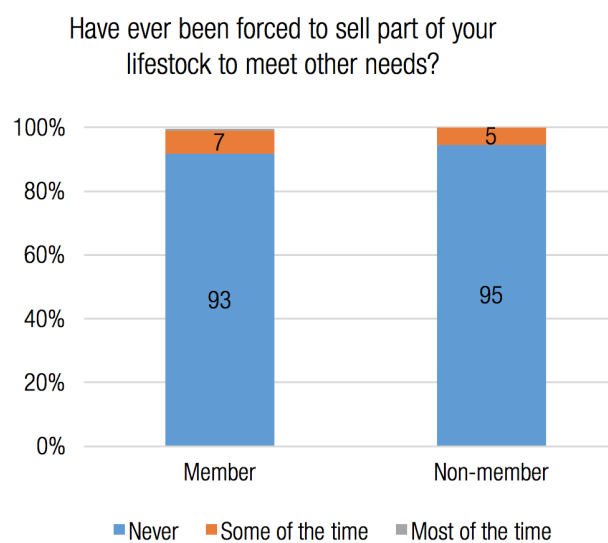
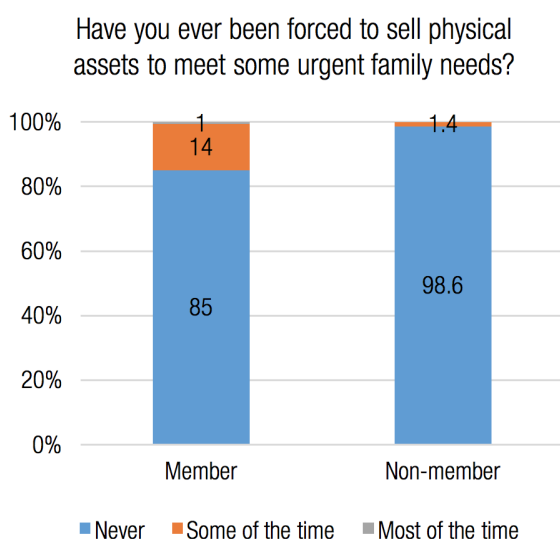


FIGURE 37. FARMING HOUSEHOLDS' RESPONSE CAPACITY TO SHOCKS

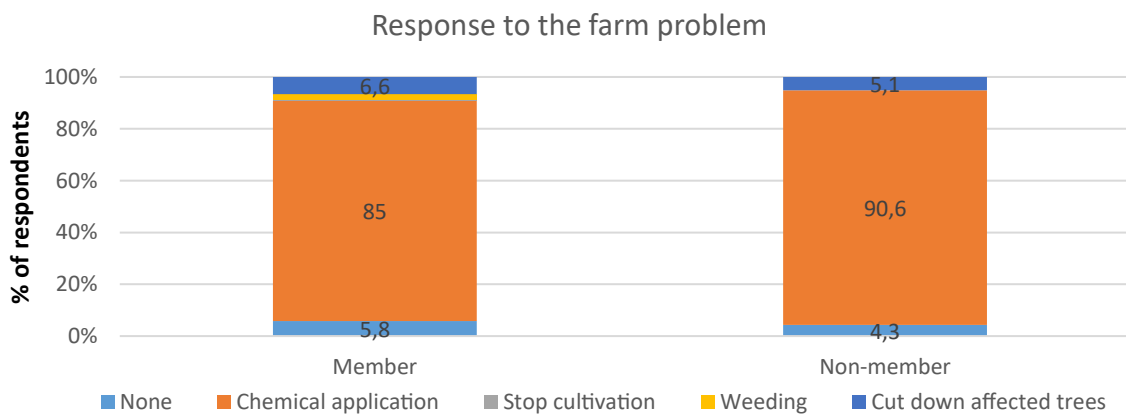
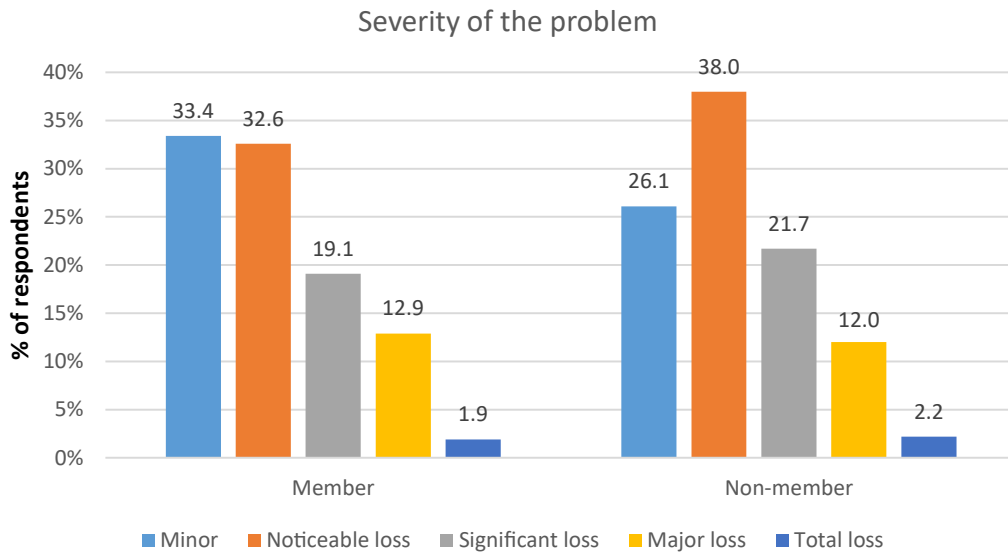
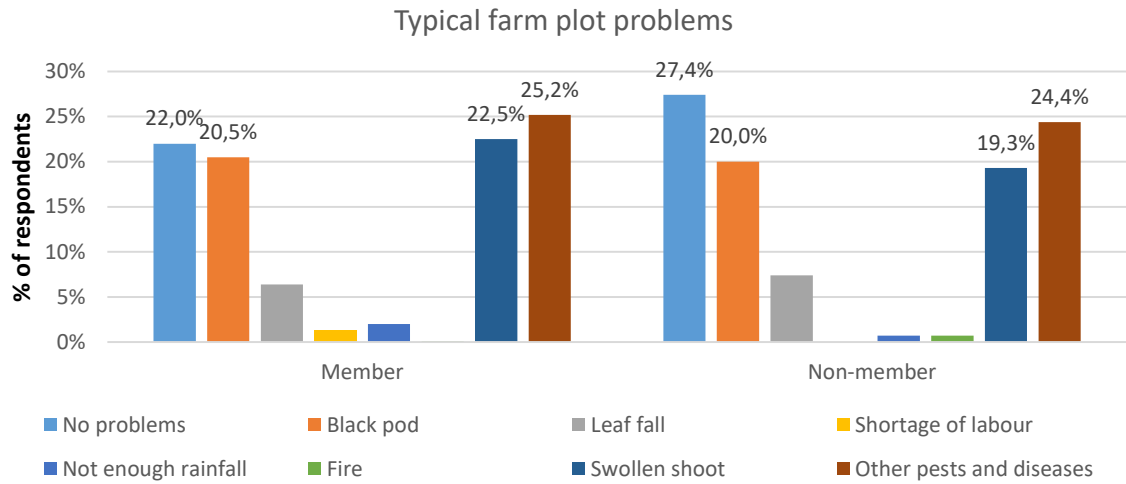


FIGURE 38. TYPICAL FARM PROBLEMS AND FARMERS' REACTIONS TO THE PROBLEMS

Summary: Shocks and resilience—cocoa-producing households

Table 41 presents an overall assessment of the shocks and resilience of cocoa-producing households, the justification of the assessment and insights for the monitoring program and interactions with stakeholders.

TABLE 41. SUMMARY—SHOCKS AND RESILIENCE OF COCOA-PRODUCING HOUSEHOLDS

Indicator	General assessment of current situation*	Justification of assessment	Insights for design of monitoring program and future interactions with stakeholders (for deepening information)
Producer vulnerability: selling physical assets	Yellow	Only 5 to 10 percent of farmers report sometimes having sold assets to meet urgent farm and family needs.	Percentage of farmers who resisted or who did not sell assets to meet pressing needs.
Producers' reaction to shocks: pests and diseases	Red	Black pod and the swollen shoot disease are among the most commonly cited diseases—32 percent of sampled households describe the losses as minor. This means that significantly more consider the losses to be noticeable, significant or major.	Capacity to identify and treat pests and diseases, in particular swollen shoots and black pod.

* *Green = overall clear positive situation for cooperative development; Yellow = overall situation provides reasons to be optimistic, but a few critical issues need to be addressed; Red = overall situation is not favourable to the development of viable cooperatives.*

6

TAKING STOCK AND LOOKING AHEAD

6.1 Taking stock

Renewed focus by the government on the cocoa sector in Côte d'Ivoire as well as a favourable attitude by the government towards both the cooperative movement and certification schemes indicate that a positive environment exists for the future development of the cooperatives. Recent reforms by the government in Côte d'Ivoire have put the state back at the centre of the cocoa sector. These reforms are restructuring and regulating the supply chain for cocoa within the country in order to ensure improved productivity and quality in cocoa and greater sustainability and improved livelihoods for cocoa farmers.

The cooperative movement is one initiative actively supported by the government and is relatively new in the country. Despite its young age, the country has about 3000 cooperatives although fewer than 15 percent are functional. There are reasons to hope the cooperative movement can be improved:

- government arms such as the Ministry of Agriculture (MINADER), which issues licenses to cooperatives and ensures that if a cooperative is not registered, it has no legal status;
- ANADER, another parastatal body; that provides extension services to cocoa farmers;
- SOCODEVI, a network of cooperatives that plays a vital role in strengthening the technical and organizational capacity of thousands of farmers (9000 farmers in 22 cooperatives) in the cocoa sector in Côte d'Ivoire.

It is hoped that the experience of SOCODEVI and ANADER can be capitalized on and scaled out.

However, much is required to structure and render active the more than 2500 inactive cooperatives in the country. Further, while the OHADA-UA provides a legal framework for the cooperative movement, the fact the framework does not limit the number of shares for each member can enable certain members to dominate cooperative finances and decision making, limiting the potential for genuine democracy—an important element for Fairtrade certification and the survival of the cooperatives.

Despite the young age of the cooperatives and the high percentage of inactive cooperatives in the country, all five in this study have built partnerships with a number of government and multinational companies and all claim to have written agreements with cocoa buyers. Volumes of cocoa production have increased, with a growth in membership reflected in a rise in the volumes of cocoa sold. However, while three cooperatives have been able to access Fairtrade markets through Fairtrade Sourcing Programs and to sell a high percentage of their Fairtrade product to a Fairtrade buyer, two of the cooperatives are yet to find a Fairtrade market. While the Fairtrade Sourcing Programs help secure markets for cooperatives, the high supply of Fairtrade product available can exceed the demand from markets, as demonstrated in these cases.

Currently, most cooperatives have more than one certification scheme as a strategy to diversify their sources of premiums from certification. The question that remains is how efficient is it to have multiple certifications, and to what extent cooperatives and their members respect compliance measures of the various schemes.

The fact that cooperatives in Côte d'Ivoire can buy and sell cocoa provides opportunities for the cooperatives to make profits for the benefit of their members and ensure their

future resilience and viability. However, the study finds that poor record-keeping and business administration make it unclear how the proceeds generated from sales trickle down to members. Furthermore, for cooperatives to effectively play the role of buyers, they need to be equipped with the right type of assets to support members and source the cocoa. Some cooperatives seem to have such assets, but more clarity is needed as to who owns the assets and how they are managed for the common benefit of all members.

Data collected at the household level show some room for optimism and caution. Member households demonstrated more initiative to diversify their incomes by planting different crops in addition to cocoa. The study also found that a high percentage of cocoa trees on farms are at the prime production age. However, a lack of pruning, replanting and use of new varieties means that farms may face serious aging problems in the next 10 years. This, coupled with the average cocoa-farmer age of 45 years, raises a serious threat to the sector as younger adults move out of the sector to apparently more viable cash crops or migrate out of rural areas altogether. Cooperatives will need to find ways to encourage households to invest more resources in their cocoa farms and make cocoa a more viable livelihood option.

More than 60 percent of members have had access to training on good agricultural practices, yet most of the farmers have not embraced agricultural inputs that could increase productivity. Most of the farming households do not use chemical inputs and fertilizer. Even the few who do use inputs do not apply them regularly—most likely due to their prohibitive cost. Use of modern pruning equipment and motorized sprayers to apply inputs may contribute to improved productivity; therefore cooperatives need to identify ways to improve their members' access to these inputs and equipment.

Members have significantly higher revenues from cocoa than non-members. Even so, this is insufficient to put members above the USD 1.25 per day poverty line. Furthermore, despite differences in cocoa revenue, no significant difference was found on access to basic assets for human well-being between members and non-members.

Member households have had slightly better access to education than non-members, but these levels were still quite low within households. However, access to training increased considerably since joining the cooperatives. Access to other services was still weak; for example, farmers were weakly connected to services such as loans

and inputs—important functions that well-structured cooperatives could provide to members. For this to happen, good mechanisms must be put in place. The role of SOCODEVI, other NGOs and Fairtrade can be very important in such a restructuring of cooperatives.

Farmers have the opportunity to increase their cocoa revenue from the margins generated by the cooperatives. However, this was not well-documented in the household surveys, probably because of lack of information about how the margins were used. The same was true for the Fairtrade Premium, but again, this never came up clearly in the survey as an important source of revenue.

6.2 Reflection on baseline design

Based on experiences in Côte d'Ivoire, the team offers the following recommendations for future baseline initiatives by Fairtrade:

- fewer indicators but deeper coverage of each indicator, with context-specific guidance for operationalization;
- expert consultation to identify useful proxies for unobservable elements of cocoa production (e.g. soil fertility);
- strategic approach to information collection, based on (1) ongoing monitoring of critical and easy-to-measure indicators, (2) periodic assessment of critical but difficult-to-measure indicators and (3) in-depth studies on a case-by-case basis;
- potential inaccuracies in data identified and understood and, where possible, corrected (e.g. farm size reported by farmers);
- stakeholder engagement in baseline design and setting up a system for joint monitoring, evaluation and learning (MEL), including definition of indicators, development of data collection plans and agreements on how to address possible data inaccuracies.

6.3 Suggested next steps

The baseline provides a starting point for designing interventions that guide the expansion of Fairtrade cocoa in Côte d'Ivoire. Dedicated follow-up with local stakeholders and external facilitators will allow them to fully capture the benefits of investments so far. We recommend the following next activities:

- validate baseline findings with local stakeholders (cooperative leaders, exporters, government agencies,

NGOs), with a focus on the relative importance of indicators, potential information gaps for more critical indicators and recommendations for future cocoa baselines;

- design strategy for strengthening cocoa cooperatives and farmers that addresses some of the major issues identified in the baseline, with a focus on short-term goals that could be dealt with by different stakeholders with locally available resources, as well as longer-term goals that will require collaboration for design and funding of activities;
- build alliance for implementing the strategy with other services providers;
- design and implement innovative systems: (1) identify key performance indicators and develop a strategy for operationalization, (2) plan for data collection, including partner engagement (cooperatives, farmers, others), and (3) agree on feedback loops and learning cycles for continued improvement.

7

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Appendix 1: Types of training

Type of training	Cooperative	Trainer	Number of participants		Trainees
			Males	Females	
Group dynamics and principles of cooperatives	Coop1	ANADER			Entire group
	Coop2	Consultant	8	0	Administration
	Coop3	SOCODEVI	Entire group		Members and non-members
	Coop4	PROCACAO, GIZ, Fairtrade International	3	2	Coop executives
	Coop5	PROCACAO, GIZ, Fairtrade International	3	2	Coop executives
Leadership	Coop1	FDFP	7	1	Administration
	Coop2	Consultant	8	1	Administration
	Coop3	SOCODEVI			Entire group
	Coop4	PROCACAO, GIZ, Fairtrade International	1	1	Coop executive
	Coop3	PROCACAO, GIZ, Fairtrade International	1	1	Coop executive
Farm management	Coop1	ANADER			Entire group
	Coop2	ANADER			Entire group
	Coop3	GIZ	Entire group		Members and non-members
	Coop4	PROCACAO, GIZ, RA			Entire group
	Coop5	PROCACAO, GIZ, RA			Entire group

Type of training	Cooperative	Trainer	Number of participants		Trainees
			Males	Females	
Financial management	Coop1	FDFP	7	1	Administration
	Coop2	Consultant	8	1	Administration
	Coop3	SOCODEVI	4	1	Administration
	Coop4	Fairtrade International	4	2	Coop executive
	Coop5	Fairtrade International	4	2	Coop executive
Phytosanitary conditions	Coop1	ANADER/Callivoire	Entire group		Administrators and members
	Coop2	ANADER, CADEXO (UTZ)	8	0	Applicators
	Coop3	IITA-STCP	Entire group		Members and non-members
	Coop1	ANADER			Entire group
	Coop2	Outspan			Entire group
	Coop3	ANADER/IITA- STCP/ SOCODEVI	Entire group		Members and non-members
Drying techniques	Coop1	ANADER			Entire group
	Coop2	ANADER			Entire group
	Coop3	ANADER/IITA-STCP/ SOCODEVI			Entire group
General good agricultural practices	Coop1	GIZ/ANADER			Entire group
	Coop2	ANADER			Relay farmers
	Coop3	ANADER/IITA-STCP			Entire group
Manipulation of agricultural tools and equipment	Coop1	ANADER	Entire group		Administration
	Coop2	Outspan	8	1	Applicators
	Coop3	ANADER/IITA-STCP/ SOCODEVI	Entire group		Members and non-members
Child protection	Coop1	ANADER/Ministry of Work			
	Coop2	Consultant	8	1	Administration

Note:

FDFP: Vocational Development Training Fund (Fonds de Développement de la Formation Professionnelle

ICI: International Cocoa Initiative

IITA-STCP: International Institute of Tropical Agriculture-The Sustainable Tree Crops Program

Appendix 2. Perceptions of trust

Variable	Name of Cooperatives						Test statistic
	Coop1 N (%)	Coop2 * N (%)	Coop3* N (%)	Coop4 N (%)	Coop5 N (%)	Total N (%)	
Can most people in your community be trusted or do you have to be careful?							
Generally most people in this community can be trusted	84 (78.5)	99 (87.6)	61 (74.4)	81 (69.8)	77 (68.1)	402 (75.7)	$\chi^2 = 14.93$ $p = 0.005$
You have to be careful	23 (21.5)	14 (12.4)	21 (25.6)	35 (30.2)	36 (31.9)	129 (24.3)	
Total	107 (100)	113 (100)	82 (100)	116 (100)	113 (100)	531 (100)	
How much trust do you have in Fairtrade?							
No trust at all	9 (9.8)	3 (3.1)	11 (16.9)	7 (7)	10 (10.4)	40 (8.9)	$\chi^2 = 53.84$ $p = 0.000$
No trust	0 (0.0)	0 (0.0)	0 (0.0)	3 (3)	1 (1.0)	4 (0.9)	
Neutral	1 (1.1)	2 (2.1)	5 (7.7)	1 (1.0)	3 (3.1)	12 (2.7)	
Some level of trust	3 (3.3)	3 (3.1)	3 (4.6)	2 (2)	6 (6.3)	17 (3.8)	
A high level of trust	25 (27.2)	25 (26)	21 (32.3)	46 (46)	15 (15.6)	132 (29.4)	
No idea	54 (58.7)	63 (65.6)	25 (38.5)	41 (41)	61 (63.5)	244 (54.3)	
Total	92 (100)	96 (100)	65 (100)	100 (100)	96 (100)	449 (100)	
How much trust do you have in certified buyers?							
No trust at all	3 (2.9)	6 (5.4)	15 (18.3)	7 (6.5)	7 (6.6)	38 (7.5)	$\chi^2 = 68.37$ $p = 0.000$
No trust	11 (10.7)	11 (9.8)	9 (11)	5 (4.7)	13 (12.3)	49 (9.6)	
Neutral	8 (7.8)	8 (7.1)	18 (22)	8 (7.5)	5 (4.7)	47 (9.2)	
Some level of trust	11 (10.7)	3 (2.7)	3 (3.7)	0 (0.0)	0 (0.0)	26 (5.1)	
A high level of trust	43 (41.7)	56 (50)	26 (31.7)	59 (55.1)	39 (36.8)	223 (43.7)	
No idea	27 (26.2)	28 (25)	11 (13.4)	28 (26.2)	33 (31.1)	127 (24.9)	
Total	103 (100)	112 (100)	82 (100)	107 (100)	106 (100)	510 (100)	
How much trust do you have in certified buyers to whom you sell your cocoa?							
No trust at all	13 (16.9)	7 (7.5)	18 (27.7)	9 (9.8)	8 (9.2)	55 (13.3)	$\chi^2 = 59.53$ $p = 0.000$
Neutral	2 (2.6)	7 (7.5)	12 (18.5)	8 (8.7)	7 (8)	36 (8.7)	
Some level of trust	4 (5.2)	2 (2.2)	2 (3.1)	1 (1.1)	7 (8)	16 (3.9)	
A high level of trust	36 (46.8)	52 (55.9)	25 (38.5)	34 (37)	25 (28.7)	172 (41.5)	
No idea	22 (28.6)	25 (26.9)	8 (12.3)	40 (43.5)	40 (46)	135 (32.6)	
Total	77 (100)	93 (100)	65 (100)	92 (100)	87 (100)	414 (100)	

Variable	Name of Cooperatives						Test statistic
	Coop1 N (%)	Coop2 * N (%)	Coop3* N (%)	Coop4 N (%)	Coop5 N (%)	Total N (%)	
No trust at all	27 (25.5)	22 (19.6)	23 (27.4)	27 (24.8)	19 (17.3)	118 (22.6)	$\chi^2 = 77.92$ $p = 0.000$
No trust	39 (36.8)	26 (23.2)	18 (21.4)	31 (28.4)	29 (26.4)	143 (27.4)	
Neutral	2 (1.9)	3 (2.7)	3 (3.6)	4 (3.7)	6 (5.5)	18 (3.5)	
Some level of trust	12 (11.3)	8 (7.1)	4 (4.8)	3 (2.8)	14 (12.7)	41 (7.9)	
A high level of trust	23 (21.7)	52 (46.4)	32 (38.1)	22 (20.2)	23 (20.9)	152 (29.2)	
No idea	3 (2.8)	1 (0.9)	4 (4.8)	22 (20.2)	19 (17.3)	49 (9.4)	
Total	106 (100)	112 (100)	84 (100)	109 (100)	110 (100)	521 (100)	
How much do you trust high-level cooperative staff?							
No trust at all	0 (0.0)	0 (0.0)	5 (6)	2 (1.9)	7 (6.7)	14 (2.7)	$\chi^2 = 56.81$ $p = 0.000$
No trust	0 (0.0)	0 (0.0)	3 (3.6)	3 (2.8)	3 (2.9)	9 (1.8)	
Neutral	0 (0.0)	1 (0.9)	0 (0.0)	5 (4.6)	4 (3.8)	10 (2)	
Some level of trust	4 (3.8)	4 (3.7)	6 (7.1)	0 (0.0)	8 (7.6)	22 (4.3)	
A high level of trust	100 (96.2)	104 (95.4)	69 (82.1)	92 (85.2)	79 (75.2)	444 (87.1)	
No idea	0 (0.0)	0 (0.0)	1 (1.2)	6 (5.6)	4 (3.8)	11 (2.2)	
Total	104 (100)	109 (100)	84 (100)	108 (100)	105 (100)	510 (100)	
How much trust do you have in cooperative staff at the section level?							
No trust at all	0 (0.0)	1 (0.9)	7 (8.5)	2 (1.9)	9 (8.6)	19 (3.8)	$\chi^2 = 46.83$ $p = 0.000$
No trust	0 (0.0)	0 (0.0)	4 (4.9)	3 (2.8)	3 (2.9)	10 (2)	
Neutral	1 (1.0)	1 (0.9)	2 (2.4)	5 (4.7)	6 (5.7)	15 (3)	
Some level of trust	5 (4.9)	4 (3.7)	4 (4.9)	2 (1.9)	2 (1.9)	17 (3.4)	
A high level of trust	97 (94.2)	102 (94.4)	63 (76.8)	92 (86.8)	81 (77.1)	435 (86.3)	
No idea	0 (0.0)	0 (0.0)	2 (2.4)	2 (1.9)	4 (3.8)	8 (1.6)	
Total	103 (100)	108 (100)	82 (100)	106 (100)	105 (100)	504 (100)	
How much trust do you have in section members?							
No trust at all	0 (0.0)	1 (0.9)	6 (7.4)	1 (0.9)	9 (8.3)	17 (3.4)	$\chi^2 = 62.67$ $p = 0.000$
No trust	0 (0.0)	0 (0.0)	5 (6.2)	3 (2.8)	4 (3.7)	12 (2.4)	
Neutral	1 (1)	2 (1.9)	6 (7.4)	5 (4.7)	8 (7.4)	22 (4.3)	
Some level of trust	3 (2.9)	7 (6.5)	3 (3.7)	3 (2.8)	4 (3.7)	20 (4)	
A high level of trust	98 (96.1)	98 (90.7)	59 (72.8)	94 (87.9)	76 (70.4)	425 (84)	
No idea	0 (0.0)	0 (0.0)	2 (2.5)	1 (0.9)	7 (6.5)	10 (2)	
Total	102 (100)	108 (100)	81 (100)	107 (100)	108 (100)	506 (100)	

Variable	Name of Cooperatives						Test statistic
	Coop1 N (%)	Coop2 * N (%)	Coop3* N (%)	Coop4 N (%)	Coop5 N (%)	Total N (%)	
How much do you trust government extension staff (ANADER)?							
No trust at all	2 (2)	2 (1.9)	8 (9.5)	3 (2.9)	10 (9.6)	25 (5)	$\chi^2 = 101.96$ $p = 0.000$
No trust	0 (0.0)	3 (2.8)	7 (8.3)	1 (1)	5 (4.8)	16 (3.2)	
Neutral	3 (2.9)	4 (3.8)	4 (4.8)	4 (3.8)	7 (6.7)	22 (4.4)	
Some level of trust	9 (8.8)	15 (14.2)	8 (9.5)	10 (9.5)	18 (17.3)	60 (12)	
A high level of trust	87 (85.3)	82 (77.4)	54 (64.3)	68 (64.8)	40 (38.5)	331 (66.1)	
No idea	1 (1)	0 (0.0)	3 (3.6)	19 (18.1)	24 (23.1)	47 (9.4)	
Total	102 (100)	106 (100)	84 (100)	105 (100)	104 (100)	501 (100)	
How much do you trust other organizations that work with you on cocoa issues?							
No trust at all	5 (5)	11 (10.7)	19 (23.5)	9 (8.4)	9 (8.7)	53 (10.7)	$\chi^2 = 67.009$ $p=0.000$
No trust	4 (4)	4 (3.9)	7 (8.6)	1 (0.9)	4 (3.9)	20 (4)	
Neutral	10 (10)	6 (5.8)	11 (13.6)	3 (2.8)	5 (4.9)	35 (7.1)	
Some level of trust	9 (9)	6 (5.8)	4 (4.9)	1 (0.9)	6 (5.8)	26 (5.3)	
A high level of trust	53 (53)	48 (46.6)	26 (32.1)	50 (46.7)	33 (32)	210 (42.5)	
No idea	19 (19)	28 (27.2)	14 (17.3)	43 (40.2)	46 (44.7)	150 (30.4)	
Total	100 (100)	103 (100)	81 (100)	107 (100)	103 (100)	494 (100)	
How much do you trust strangers in general?							
No trust at all	12 (11.7)	10 (9.4)	12 (15.6)	15 (15.3)	15 (15.3)	64 (13.3)	$\chi^2 = 141.63$ $p=0.000$
No trust	34 (33)	32 (30.2)	14 (18.2)	6 (6.1)	1 (1)	87 (18)	
Neutral	5 (4.9)	4 (3.8)	16 (20.8)	4 (4.1)	0 (0.0)	29 (6)	
Some level of trust	3 (2.9)	3 (2.8)	3 (3.9)	0 (0.0)	4 (4.1)	13 (2.7)	
A high level of trust	21 (20.4)	23 (21.7)	19 (24.7)	13 (13.3)	9 (9.2)	85 (17.6)	
No idea	28 (27.2)	34 (32.1)	13 (16.9)	60 (61.2)	69 (70.4)	204 (42.3)	
Total	103 (100)	106 (100)	77 (100)	98 (100)	98 (100)	482 (100)	



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