



PRO-PLANTEURS

Professionalisation des Producteurs & leurs
Organisations pour une Cacaoculture durable

Summary of the Endline Study Project PRO-PLANTEURS

Final Report

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Acronyms and Abbreviations

2QC	Quantity-Quality-Growth / « Quantité-Qualité-Croissance »
CCC	Coffee-Cocoa Council / « Conseil du Café-Cacao »
FBS	Farmer Business School
FFS	Farmer Field School
GAP	Good Agricultural Practices
GISCO	German Initiative on Sustainable Cocoa
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
MAPP	Method for Impact Assessment for Projects and Programs
PPPP	Public-Private-Partnership Platform

EXECUTIVE SUMMARY

The project PRO-PLANTEURS was planned for the period of five years (2015-2020) and was executed in two project phases (2016-2018 and 2018-2020) in the three Regional Delegations of the Coffee-Cocoa Council (CCC, Conseil du Café-Cacao) Abengourou, Aboisso and Agboville. The target was to work with 20.000 cocoa farmers and their households of 35 farmer organizations with the objective to increase their living conditions via improving the productivity of their cocoa plantations, diversifying their agricultural income sources and improving their nutritional situations as well as accompanying their organizations to become professional.

The consultancy CF-CAP Formation was selected to evaluate the performance of the project. The analytical approach used included the level of realisation of the project indicators and the impact on the beneficiaries included already the first phase of the project. The data used were primary data collected by the consultancy as well as secondary data made available by the project. The consultancy mission conducted a survey of 657 cocoa producing households in the project area. The majority of the 400 households of the baseline study could be re-interviewed and divided into beneficiaries and non-beneficiaries of the project, i.e. participants in at least one PRO-PLANTEURS activity and non-participants. All those households were part of the first project phase, i.e. included already in 2016. Another 300 beneficiary households of the second project phase, i.e. included in 2018, who took part in at least one PRO-PLANTEURS-activity, were also interviewed. In addition, semi-structured interviews were conducted with the project staff (GIZ), implementing partners and the financing partner CCC. Furthermore, data of 40 PRO-PLANTEURS (33) and non-PRO-PLANTEURS (7) farmer organizations were collected using a structured questionnaire in interviews with the managing staff. The mission also realised six focus group discussions in the communities of beneficiary (3) and non-beneficiary (3) farmer organizations.

Conclusions to be taken away from the evaluation:

Implementation of the project

The mission notes that the project was set up in accordance with the dispositions guiding agricultural development projects, i.e.: (i) a perfect alignment of the project objectives with the national development objectives of the sector and in relation to the main problems of the Ivorian cocoa sector, (ii) the carrying out of a baseline study to set the reference and target values of the main indicators, (iii) the existence of a strategic partnership framework for the coordination and execution of the project.

The analysis of the implementation of the project's main activities shows that all the activities have very satisfactory levels of achievement, except for the Farmer Business School trainings, where the projected targets of trained persons are not yet achieved since some activities continue in the field.

The beneficiaries' gross revenue situation

Compared to the data of the baseline situation, the average cocoa income of the heads of beneficiary households¹ improved by 2.2% (1,538,386 FCFA or 2,349 EUR² to 1,572,780 FCFA or 2,401 EUR) in 2018/19. The average income of beneficiaries since 2016, (1,737,833 FCFA or 2,653 EUR) is higher than

¹ In the baseline study, only the cocoa revenue of household heads was asked and extrapolated for the partners. This is why only income of household heads is compared here.

² As in the baseline study of 2016 an exchange rate of 1 EUR = 655 FCFA is applied throughout the document.

that of the reference situation. The income of beneficiaries since 2019, (1,424,350 FCFA or 2,174 EUR) is lower as in the reference situation of 2016.³

The mean revenue for the total household stemming from agricultural diversification was 1,389,453 FCFA in 2019, while 1,436,993 FCFA in 2016. Due to a very high variation in the diversification data in both surveys, the median shows the picture of a typical household better. The median in the baseline study was at 392,423 FCFA or 584 EUR. In the endline survey, the group integrated since 2016 increased the median income from agricultural diversification by 28% to 488,000 FCFA or 745 EUR. The group integrated since 2019 is starting from a lower income level from diversification than in the baseline survey (245,000 FCFA or 374 EUR). Thus, the project allowed the farmers to implement diversification measures and to generate revenue from them.

Realisation of the project's outcome indicators

The realisation of the outcome indicators is overall satisfying.

	Objective	Level of the indicator in 2020	Level of realisation
O1	80% of the supported producers and their families (=16.000 families) have increased their revenues from cocoa production of at least 55% (177.000 Franc CFA/ha).	The average yield increased by 62% over the reference value and reached 523 kg/ha. The effects of GAP training and support to producers can explain this increase. About 56% of the producers and their families supported have yields of more than 500 kg/ha.	70%
O2	80% of the supported producers and their families (=16.000 families) have increased their revenues from diversified agricultural products by at least 430.000 Franc CFA/year.	The median income of producers benefiting since 2016 from project interventions has increased by 28% compared to its baseline study level. However, the income of the beneficiaries since 2019 is still below the level of the baseline study.	63% (when only considering the group trained since 2016)
O3	At least 30 % of women in the supported families (>20.000 women) have improved their revenues from diversified agricultural products by at least 55.000 Franc CFA/year.	Approximately 24% of women in the households supported have increased their income from diversified agricultural products by at least 55,000 FCFA (84 EUR) to 248,000 FCFA (379 EUR) or more. However, average and median income have decreased in comparison with the baseline study.	79%
O4	At least 80% of the supported families (=16.000 families), especially women and children experiencing food shortages, have improved the diversity of their nutrition by	The analyses indicate that 86% of the women benefiting from the awareness-raising sessions on Good Nutritional Practices consume at least 5 food groups. The results relating to all the beneficiary households of	103%-107%

³ Household sizes in 2016 and 2020. In 2016, a household size of 10 persons was counted, which induces an income per capita of 153,839 FCFA or 235 EUR. In 2020 the average household size of the beneficiaries was 7,1, transferring to a cocoa income per capita of 221,581 FCFA or 338 EUR and thus an increase of 43%. The household size of beneficiaries since 2016 was 7,5 and for those since 2019 6,6 respectively in 2020. This leads to a per capita income of 231,711 FCFA or 354 EUR for the first group and of 215,811 FCFA or 329 EUR for the second group. Thus, cocoa income per capita in a household increased for both groups.

	<p>consuming at least 5 food groups all year round. (reference: household « dietary diversity score »)</p>	<p>the project show that 82% of women consume at least 5 food groups. In average women consume 6,3 different food groups per day.</p>	
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Performance regarding the project’s output indicators

Indicator R1.1: 100% of supported cooperatives (=50 cooperatives) have developed business plans, development plans and commercial organisational structures.

This indicator is considered satisfactory by the mission. Of the 18 farmer organizations supported since 2016, 17 were visited by the mission. All of them have developed basic business plans, development plans and corporate organisational structures. This indicator was 100% achieved for the cooperative societies supervised since 2016. The farmer organizations supported since 2019 have not yet completed their training. Thus, they are not on the same level. Taking all farmer organizations together, the indicator was achieved by 79%.

Indicator R1.2: The number of women assuming responsibilities in farmer organizations has increased by 30%.

The mission notes that the proportion of women being in paid positions in the farmer organizations increased from 12% to 15%, translating in a growth of 25%. The indicator was achieved by 83%.

Indicator R1.3: 20% of the cooperatives' facilitators (lead farmers, animators and others) are women.

The mission notes that 26% of the facilitators are women (74 “animatrices rurales” and one group administrator). The indicator was achieved.

Indicator R2.1: At least 80% of the producers (=16,000 producers) have access to GAP-trainings, selected plant material and/or advice for soil improvement.

Initially, 16,000 producers were to be trained in Good Agricultural Practices (GAP). However, the project changed its objective during implementation, such that only 5,720 producers should be trained in GAP, while 16,000 producers should be trained in farm management (Farmer Business School, FBS) and 16,000 sensitized on Agroforestry. At the end of the project 5,431 producers were trained in GAP, 7,735 trained in FBS and 12,801 took part in the sensibilisation sessions on agroforestry. The indicator was achieved by 80%.

Indicator R2.2: At least 30% of participants at trainings on productivity increase, FFS, FBS, CCE, IPM or biodiversity are women.

Only 18% of the participants were female, 10% in Farmer Field Schools (GAP) and 24% in FBS. The indicator was achieved by 60%.

Indicator R2.3: At least 80% of trained producers (=12.800 producers) apply the recommendations.

Approximately 70% of the producers apply at least three recommendations. The indicator was achieved by 88%.

Indicator R2.4: At least 80% of trained producers (=12.800 producers) apply agroforestry systems which also include native shade trees.

85% of the producers have shade trees in their plots. All of them (85%) left trees in their plantations and 66% planted new shade trees. The indicator was achieved by 106%, however, the density of shade trees per hectare is not sufficient.

Indicator R2.5: 250 young producers (on average 5 per farmer organization), of which at least 50 are women, are trained and specialized as service providers in the cocoa sector.

347 (of which 80 women) were trained in nine service units, however, only 307 (of which 80 women) were under the age benchmark of 35 years. The indicator was achieved by 123% counting only persons below the age of 35.

Indicator R3.1: At least 80% of the supported families (>16.000 families) apply the good nutritional practices (BPN). (reference: National Multisectoral Plan for Nutrition, indicator Action 1.1.2.9)

80% of the families apply at least three Good Nutritional Practices, among the most cited were washing hands, keep the kitchen clean, eat well-balanced and eat fruits and vegetables. The indicator was achieved by 100%.

Indicator R3.2: At least 50% of supported producer families (>10.000 families) apply improved practices for their agricultural productions (food crops, husbandry).

72% of the producers apply good practices. The indicator was achieved by 144%.

Indicator R3.3: At least 2.000 women in the supported families are assisted to realize income generating activities (IGA). (reference: National Multisectoral Plan for Nutrition, indicator Action 5.1.2.1)

In total, 2,117 women were supported in Income-Generating-Activities. The indicator was achieved by 106%.

Indicator R4.1: At least 50% of supported cooperatives (>25 cooperatives) have access to information platforms to share lessons learnt and good practices.

All of the integrated farmer organizations have access to the information platforms. The indicator was achieved by 200%.

Indicator R4.2: At least 30% of supported cooperatives (>15 cooperatives) participate at the activities of the platforms.

All of the integrated farmer organizations participate regularly at the exchange events of the project. The indicator was achieved by 333%.

1 INTRODUCTION

1.1 Context of the study

The cocoa sector is a strategic sector for the Ivorian economy. It contributes to 14% of GDP and 40% of the country's export earnings.⁴ However, the sustainability of the sector is threatened by numerous challenges such as (i) low productivity of cocoa plantations, (ii) the poor quality of the beans, (iii) the proliferation of diseases and pests in the plantations, (iv) the low level of professionalization of producers and their organizations, (v) climatic hazards and (vi) the low level of diversification of farms. All these constraints have a negative impact on the income of cocoa farmers, for whom the sale of cocoa constitutes the main source of income.

To meet these challenges, the Ivorian Coffee-Cocoa Council - Conseil du Café-Cacao (CCC) - has developed a Quantity-Quality-Growth (2QC) programme for the period 2019-2023, the overall objective of which is to secure the incomes of all stakeholders in the coffee and cocoa value chain and to contribute, in particular, to the promotion of the socio-economic well-being of producers.

The PRO-PLANTEURS project co-financed by the Conseil du Café-Cacao, the members of the German Initiative for Sustainable Cocoa (GISCO) and the German Government is in line with the intervention logic of the 2QC programme, in particular in four of the six priority areas, namely: Axis 1 Improving farm productivity, Axis 2 Improving quality, Axis 3 Improving product marketing and Axis 6 Professionalisation of producers and their organisations.

The five-year project (2015-2020) has been divided into two phases: 2016-2018 and 2018-2020 for the selection of the farmer organizations. It was implemented in three Regional Delegations of the Conseil du Café-Cacao (Aboisso, Agboville and Abengourou) on a target of 20,000 producers and their households in 35 cocoa farmer organizations.

The implementation of the project was expected to achieve the following results: (i) the selected professional agricultural organizations are structured, provide attractive services to their members and improve their income through improved market access. (ii) Producer families, members of the cooperatives/producer organizations increase their yields in a sustainable way, produce cocoa beans in line with market requirements by enhancing biodiversity on the plantations. (iii) Producer families increase the diversification of production and consumption of nutritious food products and (iv) Lessons learned from innovative approaches are capitalized within the Ivorian Public Private Partnership Platform.

1.2 Objectives of the evaluation mission

The general objective of this evaluation mission is to assess the achievement of the project's indicators while highlighting the effects of the project's activities on the beneficiaries, in particular the farmer organizations and the families of the members of these organizations.

Specifically, this involves (i) measuring the achievement of project performance indicators, (ii) analysing the effectiveness of the implementation of planned activities, (iii) measuring the effects of project activities on farmer organizations and (iv) measuring the effects of project activities on cooperative producer member households in terms of agricultural production (cocoa and diversification), household income and nutrition.

⁴ Revue des JNCC 2019, Le Conseil du Café-Cacao

1.3 Context of the project implementation

The achievement or not of a given result may be influenced by several phenomena, including the environment in which the project activities are implemented. As part of our study, we analysed the socio-political, economic and climatic environment in order to understand whether there are any links with the results obtained from the project.

1.3.1 Socio-politic context

The PRO-PLANTEURS project started after the 2012 post-election crisis in Côte d'Ivoire. The project's intervention zones (Abengourou, Aboisso and Agboville) were therefore accessible and producers in these zones were normally carrying out their activities as they do everywhere in Côte d'Ivoire.

1.3.2 Economic context

During the project implementation period (2015-2020), the farm-gate price of cocoa experienced variations that strongly influenced the income of cocoa farmers. Although it can be assumed that price fluctuations affect producers' investment choices and decisions, it should be noted that, in general, the adjustment on the production apparatus is not automatic. Producers tend to maintain productive capital even when prices fall.⁵ A significant development during this period was the decision by the Conseil du Café-Cacao to halt the creation of new cocoa plantations from 2018 onwards in order to manage the marketing of cocoa beans. This decision was materialized in the field by the cessation of the distribution of selected cocoa seeds to producers.

1.3.3 Climatic context

The analysis looked at the rainfall patterns over the last four years to see if rainfall disturbances may have influenced the production of cocoa trees in the project areas. The evolution of rainfall curves is in line with that generally observed in these areas, i.e. a bimodal regime with two rainy seasons (May-June and September-October) and two dry seasons (July-August and December-March). The year 2016 was the least rainy year in the three zones with a very marked deficit in Agboville zone (606.8 mm) compared to 1093.5 mm in Abengourou and 1431 mm in Aboisso respectively. For the other years, rainfall was regular.

2 METHODOLOGICAL APPROACH

A final evaluation determines the extent to which the project has achieved its objectives. It relates to what was undertaken to do, what was accomplished and how the activities were carried out. In the context of this study, the final evaluation of the PRO-PLANTEURS project provides an opportunity to take stock of achievements, analyse the direct effects and make an overall assessment. Moreover, impact is a situation resulting from significant and lasting changes, positive or negative, planned or unforeseen, in the lives of beneficiaries and attributable directly or indirectly to project interventions.

The intervention Logic of the project is depicted in Table 1.

⁵ Ruf François, Agkpo Jean Luc. 2008. Etude sur le revenu et les investissements des producteurs de café et de cacao en Côte d'Ivoire. <https://agritrop.cirad.fr/548837/>

Table 1: Intervention Logic of the Project

Activity	Products	Intermediary Results	Final objectives
Increasing Cocoa Productivity and Revenue			
<ul style="list-style-type: none"> - Training in Good Agricultural Practices (GAP) - Training in farm and household management (Farmer Business School) - Awareness-raising on agroforestry and good environmental practices 	<ul style="list-style-type: none"> - Number of participants in GAP - Number of Farmer Field Schools installed and functional - Number of training sessions conducted - Number of women benefitting from the activities - Quantity of forest shade trees planted 	<ul style="list-style-type: none"> - Respect of the opening norms of plots (period of production entry) - Respecting the maintenance norms (pruning, thinning, trimming) - Respecting the plot density norms - Respecting the harvest norms - Respecting good post-harvest practices - Cocoa plots including forest shade trees - Respecting good environmental practices 	<ul style="list-style-type: none"> - Increase of productivity (yield/ha) of the cocoa plots - Increase in the quality of cocoa beans - Improvement of the living conditions of the households - Reduction of deforestation and strengthening the fight against climate change
Increasing Revenue from Agricultural Diversification and Improving Nutrition			
<ul style="list-style-type: none"> - Awareness-raising on Good Nutritional Practices - Awareness-raising on Diversification of Agricultural Production - Training on cultivation of cultures and husbandry 	<ul style="list-style-type: none"> - Number of benefitting participants and their households - Number of women benefitting from the activities 	<ul style="list-style-type: none"> - Area under food crops - Source of diversified income 	<ul style="list-style-type: none"> - Strengthening the nutritional situation of the cocoa-producing households - Increase of the food offers
Strengthening farmer organizations			
<ul style="list-style-type: none"> - Training of the managers of the farmer organizations (diagnostic, training and coaching) 	<ul style="list-style-type: none"> - Development plan - Business Plan - Professional organisational structures 	<ul style="list-style-type: none"> - Strengthening their governance - Strengthening their cooperative spirit - Service to their members 	<ul style="list-style-type: none"> - Increasing the own resources and their capacity for auto-financing - Increasing the independence of the farmer organizations - Improving the well-being of their members - Creation of stable employment

2.1 Secondary data collection

The secondary data were collected during project implementation by consultancies, the PRO-PLANTEURS team and the implementing partners:

- Data basis of the baseline study
- Data bases of the implementing partners (ANADER, L'Eveil, TechnoServe)
- Data bases of the PRO-PLANTEURS-Team and Monitoring data
- Mission reports of the implementing partners
- Data bases and reports of the case studies (2019 and 2020)

The review of documentation and the use of secondary data made it possible, among other things, to refine the sampling of producer households and cooperative societies for the field surveys.

2.2 Primary data collection

Four types of primary data were collected. A household survey was conducted, farmer organizations were questioned, interviews were made with the project team and PRO-PLANTEURS-partners, and focus group discussions were undertaken.

Household surveys

In total, 657 households were questioned in all three regions of the project (Abengourou, Aboisso, Agboville) using a structured, programmed questionnaire with "Survey Solution" on tablets in mid-March 2020. The focus was to re-interview the 404 households interviewed for the baseline study in 2016. Almost all of the households interviewed in 2016 belonged to the first group of farmer organizations integrated in the project in 2016. One farmer organization in the sample was in the end not integrated into the project. To complete the sample with households being members of the second group of farmer organizations selected in 2018 and integrated in the project in 2019, 300 participants of PRO-PLANTEURS-activities were randomly selected of this group. The sample can be grouped into three sub-samples:

- 1 255 re-interviewed households of 2016, who have participated in at least one PRO-PLANTEURS-activity since 2016
- 2 113 re-interviewed households of 2016, who have not participated in any PRO-PLANTEURS-activity; this group serves as counterfactual⁶
- 3 289 households who were firstly interviewed in 2020 and who have benefitted from at least one PRO-PLANTEURS-activity since 2019

Thus, 368 of 404 (91%) interviewed for the baseline study were re-interviewed for the endline study. The households of the farmer organization in the end not included in the project were not interviewed. The objective of at least 700 interviewed households could not be achieved due to the increasing fear of households to invite and meet the interviewers caused by the spreading of the virus Sars-CoV-2.

In each household the household head or the person in the position to provide information about the household was questioned. The wife(s) were interviewed for verification of data, especially household revenues and nutrition data.

⁶ The grouping by auto-selection is considered in the evaluation.

Farmer organizations

It was foreseen to interview all of the 35 farmer organizations integrated in the project as well as 17 farmer organizations not part of the project as counterfactual. 33 PRO-PLANTEURS farmer organizations and seven other farmer organizations could be interviewed mid-March. Ten non-beneficiary organizations were not willing to participate because they were not part of the project. The interviews were conducted using a structured paper-based guide.

Interviews with implementing partners and the project team

Semi-structured interviews were made with the GIZ-project-team, the Conseil du Café-Cacao (CCC), the implementing partners and managers of farmer organizations.

Focus Group Discussions

Six of the planned nine Focus Group Discussions were realized. Two discussions in communities of the three regions (Abengourou, Aboisso, Agboville) were led, one each with beneficiary farmers and farmer organizations and one with non-beneficiary farmers and farmer organizations. The discussions were guided by the tool Method of Impact Analysis for Projects and Programs (MAPP), a participative and multidimensional analytical method based on social standards. These social standards are specific to communities and represent the structural conditions for a better quality of life. Thus, the MAPP's approach applied has revolved around the quality of life using a trends matrix, an influence matrix and a development matrix.

The groups were composed of men and women and were formed in a heterogeneous way in order to generate interesting discussions, obtain a complete picture of the project and identify potential differences and conflicts among beneficiaries and social sub-groups.

3 SOCIO-ECONOMIC CHARACTERISTICS OF THE COCOA FARMER HOUSEHOLDS

The analysis of the characteristics of the 657 producer households surveyed (beneficiary since 2016, beneficiary since 2019 and non-beneficiary since 2016) focuses on the description of the age structure of household members, the educational level of the head of household, the size of the household, the marital status of the head of household and the occupation status of the head of household. We adopt the INS definition for a household, which states that an ordinary household is made up of a set of persons, who:

- live under the same roof or in the same plot,
- recognize the authority of the head of household,
- pool resources, in part or in whole.

3.1 Socio-economic characteristics of the interviewed households

3.1.1 Composition of the household

The 657 surveyed households have 3,698 members. The proportion of men in producer households is 51.12% and women 48.88%, i.e. a sex ratio of 105 men for every 100 women. 88% of household heads are men.

Table 2: Household composition

	Beneficiaries since 2016	Non-beneficiaries since 2016	Beneficiaries since 2019	Total
Minimum	1	1	1	1
1er quartile	5	5	5	5
Moyenne	7,5	7,4	6,6	7,1
Médiane	7	7	6	6
3ème quartile	9	9,5	8	8
Maximum	18	16	15	18

Source: Data from the household survey, endline study PRO-PLANTEURS, 2020

3.1.2 Age structure of the household

The age pyramid has a wide base and a narrow height (see Figure 1); the population is relatively young. There is a narrowing of this pyramid for men aged 20 to 35. The phenomenon of fewer young men in this age group in the rural areas is increasingly observed in Côte d'Ivoire and could be explained by a rural exodus of young people in this age group to the cities.

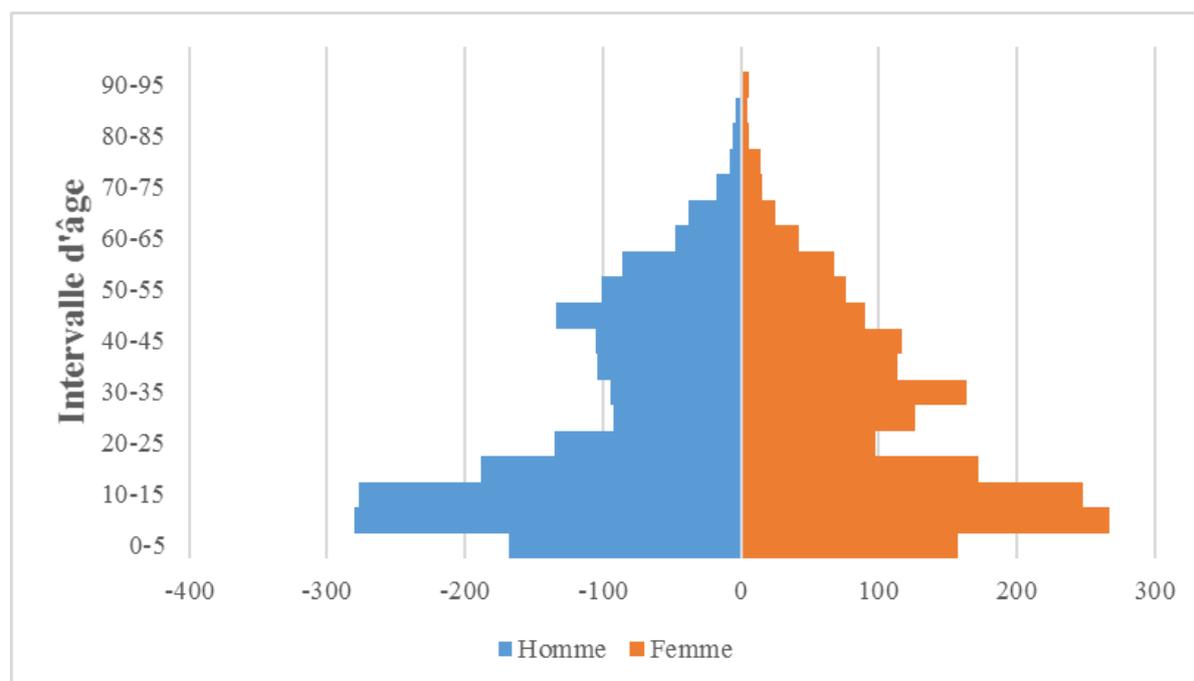


Figure 1: Age pyramid of the surveyed population

Source: Data from the household survey, endline study PRO-PLANTEURS, 2020

3.1.3 Education

The majority of household heads surveyed has a low level of education regardless of the category of producers surveyed (72% have at most the primary level). 34% of household heads have no level of education, 38% primary level, 26% secondary level and 2% have superior education.

Of the 1,232 children in obligatory school-age (6-14), 83.44% attend school. The data shows a delay in school attendance among children who do attend school. Out of 388 children aged 12-16, nearly 38%

who should have been in secondary school are still in primary school. Of the 38%, 42% are girls and 58% are boys.

Birth certificates are often necessary to be able to be inscribed at school (often not yet primary level). Of the 3,034 children in the households, 98% possessed a birth certificate. The parents highlight that the issuance of a birth certificate for their children is an essential element in the life of their children.

3.1.4 Family status of the household head

The data shows that almost half of the producers are married and 10% are single, while almost one third of producers live in a cohabitation relationship. Marriages combines formal (legal) and customary or religious marriage. Furthermore, 7% are widowed and 2% are divorced.

3.1.5 Income sources of the household

Given the target population of the study (cocoa producing households), almost all heads of households indicate agriculture as their main activity as shown below. Most of the households own their land (see Table 3).

Table 3: Principal Activity of the household heads

	Beneficiaries since 2016 (%)	Non-beneficiaries since 2016 (%)	Beneficiaries since 2019 (%)	Total (%)
Principal activity				
Farmer	96,08	98,23	95,85	96,35
public servant	0,78	0	0,35	0,46
Merchant	0,39	0	1,38	0,76
Housekeeper	0,78	0	0,35	0,46
Private employee	0,78	0,89	0,69	0,76
Other	1,18	0,89	1,38	1,22
Status of farm land				
Tenant	3,27	0,90	1,44	2,05
Independent	0	0	1,08	0,47
Land owner	96,73	99,10	97,47	97,47

Source: Data from the household survey, endline study PRO-PLANTEURS, 2020

3.2 Agronomic characteristics of the cocoa farms

3.2.1 Cocoa area

The average area of cocoa per household is 4.4 hectares. One (1) agricultural household out of ten (10) farms has at least 8 ha. This situation reflects the fact that cocoa production is dominated by a large number of small producers, who farm relatively small areas while a small number of producers own relatively large areas.

3.2.2 Age of the cocoa plots

The cocoa plantations in the sample are aging with an average age of 20 years (see Table 4). The age between the last two quartiles is between 25 and 40 years. This result is in line with the current characteristics of the ageing Ivorian cocoa plantations, marked by the attack of diseases and pests.

Table 4: Age of cocoa plantations

	Beneficiaries since 2016	Non-beneficiaries since 2016	Beneficiaries since 2019	Total
Minimum	4	4	4	4
1st quartile	13	12	11	12
Mean	20	21	18	19
Median	19	20	16	18
3rd quartile	25	30	24	25
Maximum	40	40	40	40

Source: Data from the household survey, endline study PRO-PLANTEURS, 2020

4 PERFORMANCE ANALYSIS OF THE PROJECT IMPLEMENTATION

This chapter discusses the analysis of project performance. It addresses, on the one hand, the implementation of project activities from the point of view of the effectiveness and sustainability of the achievements, the achievement of achievement indicators and the effects and impacts of the project, on the other hand.

4.1 Analysis of project implementation

This analysis focuses on the effectiveness and sustainability of the project's achievements. Effectiveness deals with the analysis of the implementation strategy and the achievements obtained in the implementation of the activities. Sustainability analysis assesses the ability of the project's achievements to be sustained over time at the end of the project phase.

4.1.1 Analysis of the implementation strategy

Alignment with the program 2QC and CocoaAction

The PRO-PLANTEURS project is an integral part of the national strategy for the development of the cocoa sector contained in the 2QC (quantity, quality, growth) programme in four of its strategic axes: improving the productivity of cocoa farms (strategic axis 1), improving quality, traceability and certification (strategic axis 2), improving the marketing of products (strategic axis 3) and the professionalization of producers and their organizations (strategic axis 6).

Activities to promote gender, succession by the younger generation and diversification, addressed by the project, are an integral part of the 2QC program. In addition, the PRO-PLANTEURS project is also aligned with the World Cocoa Foundation (WCF) CocoaAction, itself an integral part of 2QC.

Location of the project and choice of beneficiaries

The intervention areas of the project, as well as the choice of beneficiary farmer organizations were made in consultation with the Conseil du Café-Cacao (CCC) and the other project partners. The selected farmer organizations were part of the cocoa value chain and have the will and capacity to

develop, with the support of the project, into more effective professional farmer organizations. The selected organizations were therefore mid-level cooperatives that possess basic capacity and therefore demonstrate great potential for development.

Definition of a reference situation (baseline study)

The implementation of the project was preceded by a baseline study to set a reference of the situation of the target group a priori in order to deduce indicators to measure the project's performance.

Development of strategic partnerships for project coordination and implementation

Most of the activities are implemented by public and private cooperation partners through service provision contracts, Memorandum of Understanding or matching grants or integrated public-private partnership projects. The partnership includes:

- The project steering committee (COP) is composed of representatives of MINADER, CCC, GISCO, and WCF and is responsible for the orientation of the project.
- The Technical Committee (CTC), composed of representatives of the CCC, MINADER, ANADER, CNRA, local members of GISCO, GIZ, WCF, University of Abidjan, GAIN, assists the project and informs and prepares the Steering Committee meetings.
- Contracting of national and private structures for the execution of activities: ANADER, Technoserve, Léveil Entreprises, Tree Consulting, independent consultants, etc.
- Monitoring and evaluation to capitalise on what has been learned, the possible reorientation of activities and the scaling up of experience gained

Adaptation of project strategy during implementation

Two important changes in strategy were noted:

- With the decision of the CCC to stop the distribution of plant material, the PRO-PLANTEURS project has been able to take advantage of the interest in Farmer Business School training by intensifying and extending this training during the second phase of the project. The Farmer Field School trainings on Good Agricultural Practices have been maintained for non-certified cooperatives.
- During the first phase, agroforestry training was held on demonstration plots and had limited objectives. Thus, 400 producers were to be trained on these plots. To acknowledge the issue of trees in cocoa plots and, thus, agroforestry systems and to better reach its objectives (16,000), in addition to the 60,000 tree seedlings that should be produced and distributed, to reach the target of 16,000 producers, agroforestry messages were then disseminated during awareness-raising sessions.

4.1.2 Analysis of the realisation of the project activities

Except for the Farmer Business School training, agroforestry sensitization and the trainings on diversification, where trainings are still ongoing throughout the year 2020, the level of achievement of the activities is satisfying.

4.1.3 Analysis of sustainability of the project achievements

In order to analyse the sustainability of the project's achievements in terms of the capacity of producers to maintain their productive capacity for both cocoa and food crops, we analyse three (3) structural conditions for inducing significant changes over the long term. These are the enabling

environment, good practices and a robust infrastructure of connections to resources and factors of production in general.

The framework conditions are the normative framework that create the conditions for the development of producers' production. At this level, the project is consistent with the policy of the management body of the cocoa sector. From this point of view, the achievements of the project can be sustainable as long as it takes into account the needs of all stakeholders in the sector.

The holistic approach adopted by the project, which consists of seeking the well-being of the beneficiaries by strengthening their capacity to produce cocoa but also by promoting diversification, allows the household to have a diversified income basket and therefore to be more economically stable. In particular, the FBS trainings enable the entrepreneurial vision of nearly 16,000 households to be broadened by introducing the issues of crop selection, investment and farm management, and control of resources and expenses. Moreover, diversification is necessary to access more income but also to access more food resources for good nutritional practices as promoted by the project. The coherence between these components is essential for the sustainability of the project's achievements. However, the pitfalls of diversifying crops and sources of income for farming households in similar projects at the end of the support are often linked to the surplus generated by diversified crops that the household is unable to sell. The mission therefore observed that little attention has been paid to the aspect related to the conservation of diversified production and the marketing of surpluses.

The relevance and the interest aroused by the FBS trainings among the beneficiaries are undeniable. However, the monitoring of applicability by the beneficiaries has not been fully ensured. This situation could lead the beneficiaries to weariness and to falling back into their daily income management practices after the end of the project.

As far as farmer organizations are concerned, professionalisation is an ongoing process. The project has succeeded in solidifying the foundations of the structuring of these organizations for the most part by putting in place planning and management tools, regularizing the management and administration structure where everyone now knows what their role and place is. And even if there are still games of influence, it is important to recognize the progress of the farmer organizations of PRO-PLANTEURS on the path to regularizing their operation. It is however necessary that the teams of the farmer organizations are not tempted to go backwards and for this reason a follow-up could be organized through the regulatory structure, the CCC, which is also one of the donors of the project and which will remain at the end of the intervention. According to interviews with certain implementing structures and MAPP sessions, post-training follow-up by the farmer organizations themselves is, in our view, the challenge to be met to ensure that the gains made are sustainable. The duration of the coaching programmes developed was not sufficient, as reported by the interviewees, given the time required to properly implement the post-training follow-up mentioned.

4.2 Analysis of the level of achievement of the indicators

The analysis of the indicators is made by looking at the group of producers who are members of the PRO-PLANTEURS farmer organizations who have at least participated in one of the activities within the framework of the project. Evaluation of the achievement of the indicators is based on the use of data from the baseline study and data collected from producers in the endline survey of "beneficiaries since 2016" and "beneficiaries since 2019".

4.2.1 Gross revenue of the households

The overview of gross revenue from different income sources in Table 5 and Table 6 show first results regarding an income analysis. The median was used for revenue stemming from agricultural diversification as the variation of the variable is very high in both surveys 2016 and 2020. One reason can be that a few producers have high revenues from other agricultural products than cocoa (also staple foods and rubber). Therefore, we use the median income as it better depicts a typical household.

Compared to the data of the baseline situation, the average cocoa income of the heads of beneficiary households⁷ improved by 2.2% (1,538,386 FCFA or 2,349 EUR to 1,572,780 FCFA or 2,401 EUR) in 2018/19. The average income of beneficiaries since 2016, (1,737,833 FCFA or 2,653 EUR) is higher than that of the reference situation, the income of beneficiaries since 2019, (1,424,350 FCFA or 2,175 EUR) is lower than the reference situation in 2016.⁸

The mean revenue for the total household stemming from agricultural diversification was 1,389,453 FCFA in 2019, while it was 1,436,993 FCFA in 2016. The median in the baseline study was at 392,423 FCFA or 584 EUR. In the endline survey, the group integrated since 2016 increased the median income from agricultural diversification by 28% to 488,000 FCFA or 745 EUR. The group integrated since 2019 is starting from a lower income level from diversification than in the baseline survey (245,000 FCFA or 374 EUR). Thus, the project allowed the farmers to implement diversification measures and to generate revenue from them.

Further analyses concerning the sub-groups need to be performed in order to deduce the underlying effects and developments as well as the living income gap. In particular, household size and surface areas, as well as the high variation of diversification revenue has to be looked at in more detail.

⁷ In the baseline study, only the cocoa revenue of household heads was asked and extrapolated for the partners. This is why only income of household heads is compared here.

⁸ Household sizes in 2016 and 2020. In 2016, a household size of 10 persons was counted, which induces an income per capita of 153,839 FCFA or 235 EUR. In 2020 the average household size of the beneficiaries was 7,1, transferring to a cocoa income per capita of 221,581 FCFA or 338 EUR and thus an increase of 43%. The household size of beneficiaries since 2016 was 7,5 and for those since 2019 6,6 respectively in 2020. This leads to a per capita income of 231,711 FCFA or 354 EUR for the first group and of 215,811 FCFA or 329 EUR for the second group. Thus, cocoa income per capita in a household increased for both groups.

Table 5: Gross Revenue from different sources, FCFA

Revenue by income source	Income generated by	2016	2020			
		Value baseline FCFA	Beneficiaries since 2016 FCFA	Non beneficiaries since 2016 FCFA	Beneficiaries since 2019 FCFA	Total beneficiaries FCFA
Average cocoa revenue	Household head	1 538 386	1 737 833	1 381 864	1 424 350	1 572 780
	Partner	290 000*	192 287	281 436	125 440	152 267
	Household total	1 828 385	1 930 120	1 663 300	1 549 790	1 725 047
MEDIAN revenue from agricultural diversification (non-cocoa)	Partner	113 000	100 000	100 000	100 000	100 000
	Household total	382 423	488 000	346 750	245 000	327 500
Average non-agricultural income	Partner	148 505	217 933	172 366	233 241	225 089
	Household total	592 038	601 709	338 462	547 431	574 094
Total household gross revenue (cacao + diversification + non-agricultural income)	Household total	2 802 846	3 019 829	2 348 512	2 342 221	2 626 641

*income extrapolated.

Table 6: Gross Revenue from different sources, EUR

Revenue by income source	Income generated by	2016	2020			
		Value baseline	Beneficiaries since 2016	Non beneficiaries since 2016	Beneficiaries since 2019	Total beneficiaries
		EUR	EUR	EUR	EUR	EUR
Average Cocoa revenue	Household head	2 349	2 653	2 110	2 175	2 401
	Partner	430*	294	430	192	232
	Household total	2 779	2 947	2 539	2 366	2 634
MEDIAN Revenue from agricultural diversification (non-cocoa)	Partner	173	153	153	153	153
	Household total	584	745	529	374	500
Average Non-agricultural income	Partner	227	333	263	356	344
	Household total	904	919	517	836	876
Total household gross revenue (cacao + diversification + non-agricultural income)	Household total	4 267	4 610	3 586	3 576	4 010

*gross revenue for the partner was extrapolated and rounded, therefore the numbers differ between FCFA and EUR.

4.2.2 Analysis of achievement of outcome indicators

Indicator O1: 80% of the supported producers and their families (=16.000 families) have increased their revenues from cocoa production of at least 55% (177.000 Franc CFA/ha).

Due to the variations of cocoa prices, thus, revenue from cocoa, this indicator is evaluated using the productivity objective. A difference-in-difference analysis using the non-beneficiary households questioned in 2016 and 2020 as counterfactual to the beneficiary households interviewed in 2016 and 2020 concluded that productivity is significantly higher for beneficiary households. Another analysis supports findings that participation in FBS leads to a higher application rate of GAP.

Reference level in 2016	Level of the indicator in 2020	Level of realisation
Average productivity: 323 kg/ha Average revenue 323000 FCFA/ha or 493 EUR/ha	The average yield increased by 62% over the reference value and reached 523 kg/ha. About 56% of the producers and their families supported have yields of more than 500 kg/ha.	70%

Table 7: Productivity (kg/ha) of cocoa of beneficiary households, 2020

	Beneficiaries since 2016	Beneficiaries since 2019	Total Beneficiaries
Mean	523,22	524,45	523,87
Standard Deviation	202,57	219,6	211,53
Minimum	200	200	200
20%-Quantile	319,09	290,83	306,17
25%-Quartile	346,67	325	333,33
Median	500	500	500
75%-Quartile	687,5	733,33	700
Maximum	1 000	1 000	1000
Number of HH	255	285	540

Indicator O2: 80% of the supported producers and their families (=16.000 families) have increased their revenues from diversified agricultural products by at least 430.000 Franc CFA/year.

The income from diversification is obtained by adding up the household's other non-cocoa agricultural income. Income from agricultural diversification concerns food crops, cash crops (without cocoa) and livestock. The project's objective was to increase revenues from diversification products by 30%. On the basis of the reference average income this corresponds to an increase of 430,000 FCFA or 656 EUR, on the basis of the reference median income this corresponds to an increase of 114,000 FCFA or 174 EUR.

Reference level in 2016	Level of the indicator in 2020	Level of realisation
Average: 1,436,993 FCFA or 2,194 EUR Median: 382,423 FCFA or 584 EUR	The median income of producers benefiting since 2016 from project interventions has increased compared to its baseline study level by 28%. However, that of the beneficiaries since 2019 is still below the level of the baseline study.	63% (when only considering the group trained since 2016)

The standard deviation in Table 8 is very high, indicating a high variance of diversification income and the presence of extreme income levels. This is also the case for the data from the project's baseline study. Analyses based on the median, however, are more robust and stable. For this reason, the median is used in this analysis with the objective of always achieving a 30% increase in median income.

Table 8: Revenue from agricultural diversification in FCFA, 2019

	Beneficiaries since 2016	Beneficiaries since 2019	Total Beneficiaries
Mean	1 854 780	877 881	1 389 453
Standard Deviation	4 847 136	1 840 115	3 757 207
Minimum	10 000	5 000	5 000
20%-Quantile	110 000	63 000	90 000
25%-Quartile	150 000	90 000	110 000
Median	488 000	245 000	327 500
75%-Quartile	1 493 000	840 000	1 217 000
Maximum	40 530 000	14 360 000	40 530 000
Number of HH	177	161	338

The average and median incomes of producers who have benefited since 2016 from the project interventions have increased compared to the level of the baseline study. However, the average and median incomes of beneficiaries since 2019 are below the level of the baseline study. Nevertheless, activities only started in 2019 and are still ongoing in the field in 2020, thus, the effects of the trainings are not captured in the data collected. It should also be noted that the initial situation of this group is worse than that of the producers in the first phase of intervention. For the latter group, it is not possible to conclude now on the effect of diversification activities on diversified income.

Indicator O3: At least 30% of women in the supported families (>20.000 women) have improved their revenues from diversified agricultural products by at least 55.000 Franc CFA/year.

Reference level in 2016	Level of the indicator in 2020	Level of realisation
Average: 193,019 FCFA or 294 EUR Median: 113,481 FCFA or 173 EUR	Approximately 24% of women in the households supported have increased their income from diversified agricultural products by at least 55,000 FCFA (84 EUR) to 248,000 FCFA (379 EUR) or more.	79%

Generally, women's mean and median revenue is lower in 2020 than in 2016. However, 24% of women reached an income of at least 248,000 FCFA or 379 EUR. Effects of the trainings cannot be fully captured in the study as the trainings began only in 2019 and are still ongoing throughout 2020.

Table 9: Women's revenue from agricultural diversification products in FCFA, 2019

	Women beneficiaries since 2016	Women beneficiaries since 2019	Total women beneficiaries of the project
Mean	169 153	187 569	178 039
Standard Deviation	181 450	209 820	195 175
Minimum	20 000	20 000	20 000
25%-Quartile	50 000	43 290	45 000
Median	100 000	100 000	100 000
75%-Quartile	240 000	240 000	240 000
Maximum	720 000	720 000	720 000
Number of HH	74	69	143

Indicator O4: At least 80% of the supported families (=16.000 families), especially women and children experiencing food shortages, have improved the diversity of their nutrition by consuming at least 5 food groups all year round. (reference: household « dietary diversity score »)

The individual and household dietary diversity score (IDDS and HDDS) are standardized and internationally recognised qualitative measures of food consumption that reflects household access to a wide variety of foods. Dietary diversity scores are obtained by summing the number of foods or food groups consumed during a reference period. In our case, the reference period is 24 hours for 10 pre-defined food groups. In the surveys in 2016 and 2020, the women of the household were questioned in order to create the IDDS for women.

The Minimum Dietary Diversity Score for Women (MDD-W) is a proxy for the adequacy of dietary nutrient intake for women. The benchmark is five out of ten food groups, i.e. women who consume at least five food groups are more probable to cover their daily needed nutrient intake.

Reference level in 2016	Level of the indicator in 2020	Level of realisation
IDDS-W: 4,6 MDD-W: 54% consumed at least 5 food groups	86% of the women benefiting from the awareness-raising sessions on Good Nutritional Practices consume at least 5 food groups and have an IDDS of 6,8. The results relating to all the beneficiary households of the project show that 84% of women consume at least 5 food groups and have an IDDS of 6,3 (see Table 10).	103-107% (using the MDD-W)

Table 10: Results of the Individual Dietary Diversity Score of the women of beneficiary households, 10 food groups, 2020

	Households beneficiary since 2016	Households beneficiary since 2019	Total of beneficiary households
Mean	6,48	6,20	6,33
Standard Deviation	1,80	1,78	1,79
Minimum	3	2	2
25%-Quartile	5	5	5
Median	6	6	6
75%-Quartile	8	7	8
Maximum	10	10	10
Number of women	255	289	544

The women were also asked the eight questions of the Household Food Insecurity Experience Score (HFIES), an internationally standardized and recognised indicator for people’s access to adequate food over the last year. The score lies between 0 and 8. A low score, tending towards or equal to zero, indicates that the household is food secure, while a high score towards eight indicates that the household is severely food insecure.

The scale classifies households into four levels of food insecurity (food security, mild food insecurity, moderate food insecurity and severe food insecurity). A household with a HFIES of zero is considered food secure. For a HFIES between 1 and 2, the household is mildly food insecure. A household is considered moderately food insecure when the HFIES is between 3 and 5. For a HFIES between 6 and 8, the household is considered severely food insecure.

The HFIES for all beneficiary households of PRO-PLANTEURS is 1.65, expressing a slight level of food insecurity. Analysis of the classes related to food insecurity scale reveals that most of the project beneficiary households are food secure (nearly 59%). The proportions of the other classes are relatively low, with about 14% in mild food insecurity, nearly 17% of these households in moderate food insecurity, and nearly 11% in severe food insecurity. The main trend that emerges is that most of the project beneficiary households are food secure, yet 28% of households are moderately or severely food insecure.

4.2.3 Analysis of achievement of output indicators of the project components

Indicator R1.1: 100% of supported cooperatives (=50 cooperatives) have developed business plans, development plans and commercial organisational structures.

This indicator is considered satisfactory by the mission. Of the 18 farmer organizations supported since 2016, 17 were visited by the mission. All of them have developed basic business plans, development plans and corporate organisational structures. This indicator was 100% achieved for the cooperative societies supervised since 2016. The farmer organizations supported since 2019 have not yet completed their training. Thus, they are not on the same level. Taking all farmer organizations together, the indicator was achieved by 79%.

Indicator R1.2: The number of women assuming responsibilities in farmer organizations has increased by 30%.

The mission notes that the proportion of women being in paid positions in the farmer organizations increased from 12% to 15%, translating in a growth of 25%. The indicator was achieved by 83%.

Indicator R1.3: 20% of the cooperatives' facilitators (lead farmers, animators and others) are women.

The mission notes that 26% of the facilitators are women (74 animatrices rurales and one group administrator). The indicator was achieved by 130%.

Indicator R2.1: At least 80% of the producers (=16,000 producers) have access to GAP-trainings, selected plant material and/or advice for soil improvement.

Initially, 16,000 producers were to be trained in Good Agricultural Practices (GAP). However, the project changed its objective during implementation, such that only 5,720 producers should be trained in GAP, while 16,000 producers should be trained in farm management (Farmer Business School, FBS) and 16,000 sensitized on Agroforestry. At the end of the project 5,431 producers were trained in GAP, 7,735 trained in FBS and 12,801 took part in the sensibilisation sessions on agroforestry. The indicator was achieved by 80%.

Indicator R2.2: At least 30% of participants at trainings on productivity increase, FFS, FBS, CCE, IPM or biodiversity are women.

Only 18% of the participants were female, 10% in Farmer Field Schools (GAP) and 24% in FBS. The indicator was achieved by 60%.

Indicator R2.3: At least 80% of trained producers (=12.800 producers) apply the recommendations.

Approximately 70% of the producers apply at least three recommendations. The indicator was achieved by 88%.

Indicator R2.4: At least 80% of trained producers (=12.800 producers) apply agroforestry systems which also include native shade trees.

85% of the producers have shade trees in their plots. All of them (85%) left trees in their plantations and 66% planted new shade trees. The indicator was achieved by 106%, however, the density of shade trees per hectare is not sufficient.

Indicator R2.5: 250 young producers, of which at least 50 are women, are trained and specialized as service providers in the cocoa sector.

347 (of which 80 women) were trained in nine service units, however, only 307 (of which 80 women) were under the age benchmark of 35 years. The indicator was achieved by 123% taking into account the maximum age of 35 years, and by 139% for all trained young entrepreneurs.

Indicator R3.1: At least 80% of the supported families (>16.000 families) apply the Good Nutritional Practices (BPN). (reference: National Multisectoral Plan for Nutrition, indicator Action 1.1.2.9)

80% of the families apply at least three Good Nutritional Practices, among the most cited were washing hands, keep the kitchen clean, eat well-balanced and eat fruits and vegetables. The indicator was achieved by 100%.

Indicator R3.2: At least 50% of supported producer families (>10.000 families) apply improved practices for their agricultural productions (food crops, husbandry).

72% of the producers apply good practices. The indicator was achieved by 144%.

Indicator R3.3: At least 2.000 women in the supported families are assisted to realize income generating activities (IGA). (reference: National Multisectoral Plan for Nutrition, indicator Action 5.1.2.1)

In total, 2,117 women were supported in Income-Generating-Activities. The indicator was achieved by 106%.

Indicator R4.1: At least 50% of supported cooperatives (>25 cooperatives) have access to information platforms to share lessons learnt and good practices.

All of the integrated farmer organizations have access to the information platforms. The indicator was achieved by 200%.

Indicator R4.2: At least 30% of supported cooperatives (>15 cooperatives) participate at the activities of the platforms.

All of the integrated farmer organizations participate regularly at the exchange events of the project. The indicator was achieved by 333%.

5 CONCLUSION

The final evaluation mission of the PRO-PLANTEURS project was carried out within the time frame. At the end of this evaluation, it can be generally concluded that the planned activities of the project have been well implemented overall thanks to the partnership woven by the project with the technical structures. The indicators pursued during this phase of the project have been generally achieved and the project's impacts on the beneficiaries are beginning to be perceptible in terms of the adoption of new behaviours and improved incomes, especially among women involved in diversification and the strengthened capacities of the beneficiary farmer organizations.

The study notes the consistency of the project with the policy, the 2QC programme, of the management body of the cocoa sector, the Conseil du Café-Cacao (CCC). The activities of the PRO-PLANTEURS project fit into four of the six priority areas of the 2QC programme. From this point of view, the project's achievements can be sustained if it takes into account the needs of all the stakeholders in the sector.

The holistic approach adopted by the project, which consists in seeking the well-being of the beneficiaries by strengthening their cocoa production capacities but also by promoting diversification, enables households to have a diversified and therefore more economically stable income portfolio, while ensuring a balanced and varied diet for these households.

The impact of the project is therefore perceptible on the beneficiaries in terms of income from cocoa and other diversification crops, but also in terms of changes in behaviour, particularly in the governance of farmer organizations. On the one hand, a low level of financial inclusion of both producers and women has been observed. Only 34.51% of the producers integrated into the project in 2016 have bank accounts or accounts with an MFI, compared with 18.34% of producers in cooperatives that joined the programme in 2019. On the other hand, 69% of producers have a mobile money account.

Regarding farmer organizations, the project has made remarkable efforts in their capacity building. The assistance provided, and the numerous trainings have enabled them to master the notions of planning their activities and to include the gender dimension in their operations. Almost all beneficiary farmer organizations have proper financial statements reflecting the level of their activities, the situation of debts, receivables and fixed assets. However, many efforts still need to be made for their

effective professionalization. The underperformance recorded at the level of farmer organizations can be observed above all in terms of the consistency of the operational mechanism with regard to their commercial objectives, non-competitiveness in relation to the cocoa “barème”, the poor quality of internal relations and the weakness of their financial inclusions.

While most of the indicators have been achieved, some activities deserve to be initiated or strengthened. They are formulated in the form of recommendations below.

6 RECOMMENDATIONS

At the end of the analyses carried out, the mission notes the following main recommendations:

- With a view to extending the project, for each component, align the objectives pursued with the activities and indicators of the project;
- Integrate productivity improvement initiatives into a coherent plantation development plan. In this dynamic, it is fundamental to rely on data relating to cocoa resources and to integrate agroforestry systems that are profitable for both the farmer organizations and the producers;
- Develop financial models to support productive investments. These models that are to be designed should be based on the agricultural, social and economic profile of households, coupled with biological and financial assets and taking into account the profitability of certain agroforestry systems to be developed;
- Articulate the development of farmer organizations in this scheme integrating practical and operational aspects, which are, in particular,
 - i. their capacity to effectively plan their working capital requirements, to draw up a provisional profit and loss account, and to draw up a bankable business plan,
 - ii. the analysis of their competitiveness in relation to the cocoa scale,
 - iii. the coherence of their logistical organization,
 - iv. their aptitude for adequate financial inclusion,
 - v. the quality of their internal relations, and
 - vi. their capacity to be independent;
- In order to strengthen the effectiveness of rural service units, their business model needs to be structured in a robust manner. The demonstration of their profitability, their "bankability" and adequate financing mechanisms will promote their effective deployment;
- The study recommends the creation of endogenous sources of funding within the communities of producers;
- Need to set up an impact monitoring system for such types of projects.